On Growth Two

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Preface

This symposium about limits to growth is the logical sequence of Part I, published in 1974. Whereas Part I consisted of conversations about the current problems of the world with persons from the Western sphere of culture (with the exception of U Thant), Part II consists of dialogues entirely conducted in the developing nations, or the so-called Third World, the socialist countries, and Japan (with the exception of Addeke H. Boerma, director-general of the FAO and therefore the top specialist on the world's food supplies, and Aurelio Peccei, who as founder and chairman of the Club of Rome closes this symposium, as he did in Volume I).

I am aware that a heavy accent in these conversations has fallen on the USSR and Japan. This happened partly because in these two economically powerful societies wide discussion on problems of growth are in full bloom, as is the case in most Western, technically advanced nations. Some Latin American nations, such as Argentina, Mexico, and Brazil, are also engaged in these debates, and representatives of these countries are therefore present in this series. But in most developing lands, leaders and scientists are besieged by so many problems other than philosophizing or designing models on how to contain growth that the heavy representation of Soviets and Japanese in this volume is for the time being a reflection of the actual situation.

Another reason for fewer representatives of the developing nations than I would have preferred to meet and listen to was the matter of the budget. To travel to more African, Asian, and Latin American lands than I have done became impossible. I had intended to devote, as was done in Volume I, 70 conversations on the subject of limits to growth, outside the Western World, namely: 11 in the USSR, 11 in Japan, and 48 in the Third World. I therefore apologize to the peoples of developing lands that more of their views are not contained in this volume.
This time also, it was very difficult to include everyone I had wanted. President Julius Nyerere, I considered a must. A personal friend, Diallo Tellio of Guinea, for some ten years secretary-general of the Organization of African Unity in Addis Ababa, now a minister in the Sékou Touré Cabinet in Conakry, could not even be reached. With others it was difficult to find a mutually agreeable place and time owing to work schedules and travel plans. In particular I regret that China, Indonesia, and Cuba are absent. The Dutch Foreign Ministry, as well as the Dutch Embassy in Peking, tried to get in touch with Chinese authorities in order to request interviews with specialists in the ecological and environmental fields. The Chinese Embassy in The Hague did not even bother to reply to urgent appeals of my Dutch publisher. The Chinese are apparently still hiding behind their famous wall and were definitely not prepared to answer questions on these matters. Perhaps we should have asked Henry, the magician! Nevertheless, I have included in this series the speech by Vice-Premier Teng Hsiao-p'ing, as issued at the time by United Nations headquarters, on April 10, 1974, as delivered before the special session of the UN General Assembly on Natural Resources. The Chinese view on these matters thus officially expressed is, after all, too important to be left out from a collection like this. The Cuban ambassador at The Hague likewise refused to cooperate. In 1960, I had met in Havana, one could say, Fidel Castro's Kissinger, Rafael Rodriguez, who struck me as one of the key minds in the Cuban leader's entourage. I would have liked very much to include his views in this book.

Having lived and worked in Indonesia for many years as a journalist, and having written two books on the subject of Indonesia and Sukarno, in 1968 and 1973, I would have preferred to include the Indonesian point of view on matters of population and the future, as being representative for the fifth largest nation in the world (125 million inhabitants and ranking close behind China, India, the USSR, and the US). However, having been in my writings extremely critical of the right-wing officers who ousted Sukarno in 1965 by an illegal coup, with the assistance of the CIA, I have been repeatedly refused visa for Jakarta and have been told that I top the unwanted list of the present regime. This particular honor prevented me from going there and including some Indonesian views for this series.

In particular, I thank the Indian and USSR embassies at The Hague for helping to arrange some of these conversations. In Tokyo I received much valuable advice from the editor of the Japanese edition of Volume I, Professor Shumpei Kumon. In Moscow, I am grateful to Tamara Shachmazarova and Vladimir Motsjanov of the press agency Novosti, who were both extremely helpful in arranging meetings with Soviet scientists.

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All Soviet interviews were conducted in Russian and taped, after which a professional translator of National Dutch Television (NOS) set them over in Dutch and English. These texts were later approved in Moscow by those interviewed.

In particular I have to thank Aurelio Peccei of the Club of Rome for submitting possible nominees for interviews in a wide area of disciplines and situated in numerous nations. I would like to stress, however, that the final choice of all conversations entered in this volume has been entirely mine. I would like to think that the 119 conversations on global problems as offered in both these volumes will not only help to enlighten those who in our time are preoccupied in finding suitable solutions for the questions that face mankind in this latter part of our century, but that also future generations will be able to orient themselves from these discussions about the ways in which we were wrestling with their future in trying to keep the world an acceptable and livable place for all mankind.

Willem L. Oltmans
Foreword: The Need to Prepare to Act

Only one year has passed since I wrote the Foreword to Volume I of these interviews, but in this puny lapse of time the winds of change have blown human fortunes into still stormier seas.

Although not yet fully felt, the discovery that the life of nations, nay, the very foundations of industrial civilization, cannot rest on abundant, cheap oil - as we had always dreamed - has produced a new wave of shocks, tensions, and fears throughout society. At the same time, grave worries have surged up in people's minds as to the possibility of providing enough food for the world population - not the six or seven thousand million of the fabulous year 2000, but already today's less than four thousand million. Gone are the halcyon days of the Green Revolution coming to the rescue with its miracle hybrids. The stark reality to face up to nowadays is food stockpiles reduced to a minimum, and fertilizers and tractors and water increasingly hard to get, while the world climates seem to be on a changing trend for the worse. The specter of famine is thus rising again on the planet - but for the first time so huge as to be called megafamine.

These developments have deepened the human predicament, further widening the existing gaps, and separating friends. The cry for more sharing and justice in the world is mounting thunderously, and the time is approaching when it will have to be heeded. The fact that the UN General Assembly convened in a special session to declare the establishment of a ‘new international economic order’ reflects this mood. Hundreds of millions of citizens everywhere want society itself to change, to become better. For a while the human spirit, becoming awake and aware, will hope that solidarity and cooperation can do the job. This hope cannot be thwarted. We must indeed, all of us, try to devise the modes of solidarity and
cooperation to lift mankind to a new threshold and pave the way for a mature society. This is the chance and the task of our generation. If we understand it, the undertaking will appear not beyond our capacity.

But time is not on our side. III winds will continue to push us astray - unless we take control of our ship and choose our course.

This book is a contribution to thinking ahead - and preparing to act.

AURELIO PECCEI

Founder-member of the Club of Rome
On Growth II
1. Indira Gandhi

Indira Gandhi was born November 19, 1917, Jawaharlal Nehru's only daughter. She had a lonely youth, for both her parents and grandparents were continuously being dragged to jail by the British. In 1941 she married Feroze Gandhi (no relation to the father of the Indian nation, Mahatma Gandhi). Indira was arrested the year of her marriage and locked up in a prison cell with twenty-two other people, some common criminals. Besides studying in India, she went to Oxford and also to a school in Switzerland. In 1955 she entered active politics. On January 24, 1966, she assumed the Premiership of her country. Madame Gandhi has two sons, Rajiv and Sanjay. Her husband died in 1960. The author was received for this interview by the Indian Prime Minister in her office near the Presidential Palace in New Delhi.

*India is celebrating the twenty-fifth anniversary as the world's most populous democracy. How would you summarize India's failures and achievements during this first quarter century of independence after British imperialism? Where has the 'rich club' of nations truly helped and assisted India, and in what areas did they fall short of expectations or obligations?*

This is a good question to start with. When speaking of achievements and failures, the tendency is to think only of the economic balance-sheet and forget the political aspect. To me our most important achievement is the fact that a country which has greater diversity of religion, language, and race than perhaps any other has achieved such remarkable political cohesion and has succeeded in evoking the active involvement of the people in the political process. We have always been a nation of individualists. Our

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people have jealously guarded their right to think as they please. Today this freedom flourishes more vigorously than ever before.

Now for the economic aspect. Many affluent nations do have genuine sympathy for developing countries, but the majority do not seem to care, or have only derision for our efforts. By and large affluence breeds self-absorption and even a kind of forgetfulness. Many who take us to task for not having overcome poverty (in spite of achieving freedom) forget that it took several decades after the beginning of the Industrial Revolution for the prosperous countries to overcome poverty. And even today pockets of poverty and deprivation exist there and, according to expert groups set up to examine the question, will continue to do so.

The Indian Industrial Revolution could begin only after we attained freedom. In these twenty-five years we have laid the secure foundations of economic development - building the infrastructure of agricultural as well as industrial development. The success of our public health program in curbing epidemics and the vast expansion of school facilities are other positive achievements.

You have raised the question of development assistance from affluent countries. Eighty percent of our expenditure on development comes from our own people's savings and sacrifices. Something like a fifth has come from 'aid.' But this fifth is important, for much of it represents the import of new technology and skills and we are grateful for this assistance. However, it must be understood that this aid is not a simple transfer of resources. It is not a gift. In our case most of it is in the form of credits. Only a few nations have followed enlightened policies in regard to economic aid. To the others, giving has also been good business - it certainly blesseth him that gives! Also, there has been a tendency to push certain points of view along with aid. I am not referring only to political pressure. 'Experts,' whether economists or technologists, often forget that what works in a particular social milieu may not be ideal in another. Many theories of development and economic management which ignore the large historical urges of a people have been constructed. Some of these mechanistic theories have attached too little importance to social justice. We have found that growth and social justice have to be reconciled at every stage and jointly pursued.

Appreciation by affluent countries of the importance of social justice will be as helpful to the balanced development of poorer societies as suggestions for raising the aid proportion to one percent of their national product will be.

If poverty and need are Asia's foremost polluters, as you warned in your
Stockholm speech in 1972, would the growth of population remain India's principal and most urgent problem in the future?

Efforts to control the growth of population must obviously be - and are - some of our prime concerns. In many countries of Europe, smaller families have been the consequence of urbanization and industrial development.

We cannot afford to wait for such a process, for we realize that family planning can also be the means to improve living conditions. Our birthrate did not go up after the British left! But the death rate fell rather spectacularly first of all because independence puts a greater responsibility on a government to save its people's lives (We cannot think of the kind of starvation deaths - nearly three million - that were allowed to take place in Bengal in the last years of British rule), and secondly because of the new lifesaving drugs which came into use all over the world about the time we became free. The rise in our population is the direct consequence of the control of epidemics and the spread of modern public health programs. It dramatically illustrates the truth that every gain extracts a price.

Can we for that reason say that we would have fared better had we allowed epidemics to continue? Research on new methods of birth control and more widespread propaganda and the creation of greater facilities for family planning are essential.

The Swedish sociologist Gunnar Myrdal told me that if radical birth control measures were adopted now, results would only show in twenty or thirty years. Although different methods were used, both in China and Japan birthrates have fallen sharply. Recognizing the unique and strenuous efforts made by the Indian government in this area, does the government envisage a need to adopt more radical measures of birth control in the near future?

Those who are critical of us and those, like Dr. Myrdal, who are basically sympathetic toward us but would like to see greater efficiency, keep urging us to use more radical measures. But what are these measures? Can we have compulsory sterilization of men and women?

I do not know whether motherhood or fatherhood is a fundamental right, but as head of a government I know that we cannot use compulsion in such matters. Results can be obtained only through persuasion - when young parents are convinced of the advantages of small families to them and their children and that this is a matter not of destiny but of will.

The New Congress Party adopted the banner, ‘Garibi Hatao.’ If mankind does not mend its way by the year 2000 there will be three times more poor
people than affluent ones, or the poor will be using twenty to thirty times less resources of this earth than the rich nations. Obviously more loans or donations from the wealthy nations to the poor are not the answer. Where do we begin to change these trends?

Garibi Hatao, or removal of poverty, is a process. It cannot be a time-bound program, so to speak. Our poverty is so widespread and deep-seated that we cannot proclaim its eradication by a particular date. People's ideas of basic needs also keep changing. The measure of poverty is not a static one. Modern communications project new notions of needs. However, we should not and cannot promote an attitude of ‘catching up.’ The dynamics of technology are such that ‘catching up’ will be very hard to achieve. Our concept of Garibi Hatao is to provide minimum needs, the basic constituents of a livable life - sufficient nutrition, health and housing facilities, and equitable opportunities of education.

The removal of poverty cannot be equated with the acquisition of durable consumer goods which are the products of consumer-oriented industry. When glossy magazines are tempting them with such a variety of goods and gadgets, how can we persuade our educated people to keep to the path of austerity? Too many of them are even now lured by the glitter of life in America or Europe.

Ultimately, as you have rightly hinted, the ‘remove poverty’ movement of the poorer countries has somewhere to meet a ‘reduce waste’ movement on the part of the rich countries. Loans or transfer of resources from the rich to the poor are certainly of importance. But the greater urgency is to cultivate an outlook in countries, rich and poor, which regards nature not as an enemy to loot but an ally to protect and preserve. The earlier industrial revolutions indulged in the exploitation of people and of nature, ignoring the social costs. Technology must now be given a new direction keeping in mind the concept of long-term social benefits.

U Thant assured me that in his view unless the world would take most decisive steps to alter its course, man was heading to his doom. The Club of Rome initiated a computer study of the planet as a whole, called Limits to Growth. Various nations have set up computer studies on their own and models to further study what must be done and can be done to curb the present most unfavorable trends. Is the Indian Government in favor of this method of calculation and prediction and do Indian scientists take part in these types of studies?

Obviously, serious thought has to be given to these questions. Studies such as Limits to Growth are useful not so much for their quantitative
predictions, which largely depend on the assumptions made and the data used, as for the qualitative danger signals that they flash. The study also reveals the important fact that averting the global crisis toward which we seem to be heading calls for a redistribution of resources of all kinds, particularly between the highly industrialized countries and the developing countries.

Statistics and computer modeling of dynamic processes of change are of value in making immediate functional decisions but I have a feeling that extrapolation is not always an unfailing guide where basic human emotions and the play of human will are concerned. Reliance on known or ascertainable facts cannot prophesy the major turns which new political and scientific ideas or the evolution of new social and economic institutions can give to human civilization.

Far greater attention has to be paid to identify the structural changes needed to avert the present crisis in global institutions and processes. These seem to be among the major weaknesses of the *Limits to Growth* study. At the more functional level, we do use statistics in our planning, hoping to avoid many of the ill-effects which less well planned industrial progress caused in other countries.

In 1968, India introduced during the fourteenth General Conference of UNESCO a new major program called *A Design for Living*. Could you tell us about this and whether at present some of these ideals have been accepted and effectively put into action?

The idea of a new Design for Living came at an UNESCO seminar on Jawaharlal Nehru in September, 1966, in New Delhi. The Indian delegation took the initiative to move a resolution at the fourteenth UNESCO general conference in 1966, entitled *Man and His Environment: A Design for Living*. [Among the cosponsors were Japan, Mexico, Yugoslavia, Poland, and Czechoslovakia.] Possibly this sparked off the Stockholm Conference on Environment.

We have to act internationally rather than nationally since standards of wasteful affluence are infectious. We have tried to persuade UNESCO to inject new ideas and norms of human satisfaction into its program. If affluent nations do not choose a simpler life, it will hardly be possible to persuade the poorer nations to put up with what they might consider second-class citizenship.

Within India the Indian Council of Social Science Research has formed several expert panels on the specifics of planning for a new design for living. These studies should enable us to evolve new patterns of education and to
shape new attitudes. At the level of environmental improvement we have a work has already had some impact on our technologists and entrepreneurs.

At the Belgrade Conference of 1961, it was decided that your father, Jawaharlal Nehru, and Kwame Nkrumah of Ghana would travel to Moscow, and Sukarno of Indonesia and Modibo Keita of Mali to Washington, to urge Nikita Khrushchev and John F. Kennedy to consult and meet at the summit to settle the issues of the Cold War. Now, Richard Nixon did shake hands with Mao Tse-tung, and the leaders of America and the Soviet Union are exchanging yearly summit talks. You yourself met with President Zulfikar Ali Bhutto at the summit almost immediately after the Bangladesh war. Do you plan similar talks with Chinese leaders, and how do you personally view these developments in personal summit diplomacy in relation to peace and a more hopeful future?

Personal diplomacy has come into vogue because the rigidity of governmental functioning is too slow to keep pace with the changes which are taking place on the international scene. You have referred to the Belgrade Conference of 1961. At that time the task was one of arousing the world's conscience and impressing upon leaders of the large nations the importance of giving up the inflexible attitudes of the Cold War. Now, fortunately, there has been a wide realization that the Cold War approach has not worked. Direct negotiation between heads of two governments to solve bilateral problems is a slightly different proposition.

We have welcomed the bold initiatives taken by President Nixon in trying to normalize US-China relations. In fact some of his remarks on China, and the statement recently made by the US Secretary of State, Dr. Kissinger, in the UN General Assembly regarding the universality of UN membership and the importance of not ignoring large masses of humanity, contain echoes of what many nations, including ourselves, have been saying in the UN for twenty-five years.

You have referred to my meeting with Mr. Bhutto. A couple of months ago, we had another Indo-Pakistan meeting in Delhi at a nonsummit level, which also led to an important move forward. Summit meetings succeed only when careful preparations have been made. We certainly want to improve our relations with China but so far there have been no preparations for a summit.

But in spite of a détente on political fronts, perhaps, after pressures of population, the problem of food in India and Asia remains a most serious
and alarming one. Would you still maintain, in spite of indications to the contrary, that the so-called Green Revolution offers a part answer to offset chronic famine in developing nations?

The problem of cereals is not merely an Indian or Asian problem; it has become a worldwide problem. In India our attempt has been to extend irrigation, since we know that if more water is provided, every piece of land can yield more. But even irrigation has to be done with great care so as to avoid waterlogging and salination. We have also undertaken the propagation of newer methods of agriculture and the use of small tools. We have set up an extension service and enlarged credit facilities for farmers. In spite of all these, we were still importing large quantities of grain from abroad to maintain our distribution system. The traumatic experience of the famine of 1966-1967 in the States of Bihar and UP compelled us to look for quick remedies. By that time our agricultural scientists had evolved some new varieties of wheat, adapted to Indian conditions from work done elsewhere. The attainment of self-sufficiency became important politically and as a practical necessity. We approached the better-placed farmers to produce more - and helped them with credits and other inputs. They showed remarkable results.

This is generally referred to as the Green Revolution, although I myself do not care for the word and rarely use it. The approach itself has had some socioeconomic consequences, in that it aggravated inequalities in the rural areas. Certain ecological consequences are also now beginning to be felt. Our scientists and administrators are aware of these dangers and also the need to extend these experiments and programs to other grains and other areas. We are trying to improve agricultural practices and per-acre yields in the rain-fed areas where millets are grown, more through soil conservation than through any great increase in fertilizer application. We are attempting a combination of many reinforcing approaches which should solve our food problem without generating ecological problems.

Would you say that Mahatma Gandhi's spirit and influence or his famous plea that a future India make the village the center of reform and development, are now, a quarter of a century later, forgotten and dead?

This charge is often made but this is somewhat superficial. It is obvious that our society cannot have a stable future unless village India is regenerated. Urbanization is not the answer for us as indeed it is not for most other countries. Neither should Mahatma Gandhi's basic message of building self-reliant individuals and self-reliant communities be confined to India. It is of universal application. Mahatma Gandhi was one of the most
eloquent critics of modern technological civilization, but in Western countries also there have been such critics such as Tolstoy, Ruskin, and Thoreau. Now we have persons like Illich.

We could not improve our villages or introduce better farming methods without building up the necessary industrial infrastructure. Our emphasis now is on rural improvement as well as the development of the more backward regions.

You once said that it was your experience that ‘People who are at cross-purposes with nature are cynical about mankind and are ill-at-ease with themselves.’ Modern man, you felt, must reestablish an unbroken link with nature and with life. But what do we tell the children of India and Asia, in concrete terms, that they might be inspired to fresh courage and new hopes to tackle the frightening trends of today and the long-range projects of tomorrow and after tomorrow? Children of erstwhile low castes or untouchables now indeed complete a college education in modern India, but many students are unable to find work for years.

How do you, as Prime Minister of India, approach the seemingly insurmountable problem of instilling positive thinking among the millions of young, with so much sad and negative information around them?

The question combines two different problems. One is specifically Indian but the other is part of a global problem. The educational systems of other countries are also groping for a solution. Assuming that we were able to provide jobs for all those who came out of colleges and schools, the question of the educational system which alienates man from nature still remains. Historically, one of India's troubles has been a kind of specialization many centuries ago which built up a rigid caste system. Our task now is to break down the rigidity of this hereditary vocational specialization which emphasized conformity rather than innovation. When millions of people have virtually had no educational opportunity until very recently, it is natural that they should seek to prove themselves the equals of others. So there is a clamor for admission to colleges on the part of young people belonging to the backward classes. We cannot deny them these opportunities. Employment chances are slightly better for them than for others. We want to change the entire purpose and methods of education so that people do not just ask for jobs but create jobs for themselves by being manually and intellectually involved with national life. There are several worthwhile experiments but I do not think any country has found a really satisfactory answer yet. To change a long-established system in a country as vast as India is no easy task, but we are making a beginning.
We have a number of ‘basic’ education schools which work around some craft. They have not been too successful and need to be more modern in idea and application. Education cannot be confined to the classroom. It must be a lifelong process which I should like to see continuing after school and college, in the home, the field, the factory, or the office.

*What do we tell the children of India or Asia as the leading generation of our time? What can we give them?*

I am not at all pessimistic about the future, either of this country or of mankind, because there have been prophets of doom all through history and all have said the world will come to an end or something disastrous will happen, that the human race will finish. Somehow we have managed to continue. The darkest periods have produced some of the brightest lights among the human race. I expect a lot from the children.

We expect from the children today that they will look to the future. The entire situation on earth is changing so fast that only they can really keep up with the future that they want to see. I don't know what the children can achieve, but certainly, the young people of today, if they could divert their attention from all the glitter that's around society today, whether it's in the shape of consumer goods or the many other distractions which fill their minds, could look at the sort of future they want. Many young people, thinking young people, instead of trying to do something about the future, are trying to escape. They say, Let us find a quiet place and sit there. I personally prefer a quiet place myself, but I don't think it's fair to the future, to the young people's future, for this generation to be seeking peace and quiet. It's a struggle and it's a tremendous challenge. For them it's a very big examination and an opportunity.

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2. Moisey A. Markov

Professor Moisey A. Markov was born in Russia in 1908. He was graduated in 1930 in physics from the Moscow State University. Since 1934 he has worked on problems concerning the theory of elementary particles and cosmology at the Institute of Physics of the USSR Academy of Sciences. At present he is secretary of the Nuclear Physics Section of the USSR Academy of Sciences. This interview was conducted by the author in the office of the president of the USSR Academy of Sciences in Moscow, Professor M.V. Keldysh.

Is not nuclear disarmament perhaps one of the most urgent questions which faces humanity?

First of all, I should like to remind you in a few words of the history of the past wars. The First World War began with the usual rifles and artillery and finished with tanks, gas, and airplanes. The Second World War started with automatic weapons and tanks and it finished with atom bombs dropped on Hiroshima and Nagasaki. Unfortunately, science works both in favor of peace and of war. And no one can predict how a Third World War will end if it ever breaks out, when all the intellectual, moral, and economic forces of all the continents will be utilized in inventing weapons of destruction. Unfortunately, the most important characteristic of scientific research, both in the service of war and of peace, is the unpredictability of the result of such research. This characteristic of scientific research was once strongly underlined by the French scientist Juliot Curie. In scientific research reality always turned out to be more fantastic than the most unbridled fantasy. I remind you of Milton's Paradise Lost. The author gives a description of the struggle between the forces of God and the forces of Satan. He wishes to create a satanic picture, to evoke a satanic cleverness, but in his inventions for military purposes he could only think of heavy artillery and not of the atom bomb or other sophisticated means of annihilation. These were impossible for him to imagine and to predict, but reality - I repeat - appears to be considerably more fantastic than the most unbridled fantasy. As you know, the use of gas was forbidden during World War Two, but instead of
gas we saw new and far more destructive weapons. It is, of course, highly desirable and effective to forbid the use of nuclear arms but I must observe that even conventional arms are becoming more and more destructive. The only way out is complete disarmament and the prohibition of the use of all kinds of arms and of war as a means of solving the problems of our planet.

*How could nuclear disarmament be taken out of the perpetual circle of conferences that fail and collapse and how could the ultimate aim of success be accelerated?*

It appears to me that the solution of the problem of general disarmament which, as I have said before, is greatly desirable, will not be achieved all that quickly in spite of its desirability. But nonetheless each small step in this direction is extremely desirable and necessary. A great problem is the mutual distrust that exists between East and West. I must say that the great distrust which prevails among the people of this country towards the West, or more correctly, towards the policy of the West, is rooted deep in history. Right from the beginning of the organization of our state, it became the object of numerous interventions. I will not give a summary of the nature of these interventions or of the states which took part in it. I only wish to remind you that the last intervention was that by Hitler's Germany. I will not recall the sacrifices which this intervention meant for us. I will only say and repeat once more that the distrust, the caution which is shown by this country in its discussions with the West, are deeply rooted in the entire history of the existence of our state. And the step that has been taken recently in the direction of a change in this situation that was closely connected with the so-called Cold War, into the direction of reducing tensions in this relationship, was a positive step. It was not an easy one to take, not even for our country.

In the future, every step toward an improvement of relations among countries, toward building up confidence and trust will, of course, be desirable, but it will somehow of course have to be founded on some kind of material basis. For even developments in the world surrounding us are hard to predict. You know that before Hitler came to power, the Soviet Union had quite good relations with Germany, which was then democratically governed. It looked as though nothing would be able to cloud the future of these relations. But also here, it turned out that history could not be predicted. The emergence of a Nazi state and its intervention in the Soviet Union was impossible to forecast. It is extremely difficult to foretell developments in the history of states surrounding the Soviet Union. However, we should
have hope for the future. Our planet has no other way out than to achieve general and total disarmament. In order to achieve this, the coexistence of the various social systems is necessary.

Premier Chou En-lai recently told a French parliamentary delegation: ‘The greater the number of countries who possess the atom bomb, the smaller the danger of war: the H-bomb means peace...’ Do you adopt this assumption?

This recipe of maintaining peace on the basis of mutual deterrence for all countries is fraught with an even greater possibility of unleashing a nuclear war. It is difficult to balance a policy of deterrence with the help of mutual deterrence. Even the most experienced equilibrists in the circus make from time to time fatal mistakes... And the greater the number of such actors taking part in the performance the greater becomes the possibility of mistakes being made.

The above situation presupposes that the people who are responsible for playing the claviature of nuclear music firmly maintain their commonsense and that the frightful symphony, the Requiem for our planet will be never unleashed in a fit of madness. The Nonproliferation Treaty in particular constitutes a first step toward this desirable goal - but the next steps must also result in general and complete disarmament.

Mrs. Alva Myrdal, the former Swedish Minister of Science, has pointed out in my interview with her that there is a good chance of a small amount of fissionable material getting into the hands of wrong elements who might so be able to blackmail mankind.

I know that this problem is being discussed abroad. As far as I remember, this was echoed at the last Pugwash Conference in Finland in the reports of the study groups concerned. But I must say that there are no problems in this direction here in the Soviet Union. The possibility of this danger is completely excluded within the Soviet Union. I think that, if it is excluded in the USSR, the possibility that we would cause such problems can also be excluded. But perhaps in some countries abroad corresponding measures will have to be taken.

Are we being confronted with a world energy crisis? Will the Soviet Union accelerate a switch to atomic energy in industry?

I believe that the solution of the energy crisis of our planet in the near future coincides with the solution of the problems that are related to the crisis
in the Middle East. As far as the Soviet Union is concerned, it is not being threatened with an energy crisis. We have sufficient resources of oil and coal. We have a few problems in regard to the efficient use of our resources situated in Siberia and, consequently, perhaps for further development of atomic energy in the western part of our country. It seems to me that world reserves of oil and coal are adequate, given a political solution of the problems which are mainly related with the crisis in the Middle East, so as to meet demands during the next ten and possibly even twenty years. But in the course of this period the energy problems may be solved on an entirely different basis - maybe the problems connected with the obtaining of thermonuclear energy can be likewise solved. Therefore, I maintain that for the next ten years the energy problem is political and politicoeconomic. At the same time, of course, this problem will stimulate and contribute to research aimed at finding a precise scientific and economic solution for our future activities.

Generally speaking, after the discovery of the famous law of Einstein we may say that we are surrounded by an inexhaustible amount of energy, although I must admit that for the time being we have neither the possibilities nor any scientific hope of being able to utilize it within the foreseeable future. I may perhaps recall that in the year 1933, Rutherford said that those who think that it will be possible for us to use atomic energy are talking nonsense. This was said by the great Rutherford. In the same way we might perhaps say likewise that those who are now thinking of utilizing the energy which is present within matter are talking nonsense, but I would be afraid to repeat the same error that was made by Rutherford in his time.

We have, for instance, the urgent problem of nuclear waste in the immediate future. This problem was discussed in fairly great detail in a special study group at the last Pugwash Conference in Finland, which took place in August, 1973. Various points of view were put forward, but at the moment there is no scientifically founded opinion on the basis of which one can say that the development of reactor techniques and the corresponding nuclear energy are threatening to pollute our planet with radioactivity on any large scale. Rather the opposite is true. That is to say, even better solutions will be found in the future for dealing with the problem of waste and the problem of other radioactive pollution by reactors. I would remind you that radioactive pollution also occurs as a result of conventional generating stations operating on coal. For coal contains radioactive matter which remains active for a
long time, and the figures indicate that radioactive pollution by power stations working on coal is even considerably greater than by radioactive pollution caused by power stations using atomic fuel. If the problem is seen in this way, atomic fuel may be even cleaner than coal.

*It seems to me it is of the greatest importance that all scientists, from East and West, regardless of their political convictions, learn to cooperate in finding solutions for all these atomic problems.*

I think you are right and that closer cooperation between Soviet and American scientists will assist in a further rapprochement and lessening of the mutual distrust which still exists between our two countries. I believe that we are now moving in this direction. A few years ago it was completely impossible for our Soviet scientists to visit American centers - the centers for cosmic research - while it was impossible for American scientists, for instance, to visit our City of Stars, our center for cosmic research. But, as you know, an American group has now been cooperating for a fairly long time with our cosmonauts in our cosmic city. This rapprochement has taken place. In the same way, there is at present a revival in many areas of scientific activity in which closer cooperation between Russian and American scientists is taking place. A group of our scientists is successfully working at the largest American accelerator, in Batavia, while American scientists have worked in our reinforcer in Serpukhov. I believe that we are actually moving in this direction and I think that this movement will continue at an ever-increasing speed.

*So you are hopeful for the future as far as the ‘survival chances’ of man are concerned, as B.F. Skinner puts it?*

I am optimistic as regards the future of mankind. I think it will turn out that mankind has sufficient commonsense to move in the direction of more prosperity and not in the direction of annihilation. I believe that recent tendencies strengthen this conviction.

Particularly, the improvement in relations between East and West, which has been noticeable since 1972, indicates that we can hope for a better future. This improvement also played a meaningful and positive part during the Middle East conflict in 1973. I believe that it is impossible to underestimate this, and much of what we have said today concerning the cooperation between East and West - a concrete cooperation - in the field of science and technology contributes to my conviction that the future of
mankind is brighter than it appeared to be some time ago. And prospects for prosperity throughout the world are in my opinion likely to be given a real chance, particularly in relation to the coexistence of systems based on various social structures.

3. Abdelkader Chanderli

Abdelkader Chanderli was born in 1915. He studied at the Sorbonne and the Ecole des Sciences Politiques in Paris. In 1945 and 1950 he worked as a journalist and traveled to Latin America and China. In 1956 he became the first representative of the Algerian National Liberation Front and later of the provisional government of the Republic of Algeria in the United States. The author, working in 1956 at the United Nations headquarters as a journalist, met Chanderli. After the recognition of Algerian freedom by de Gaulle, Mr. Chanderli became the first permanent representative of his country to the United Nations. He returned to Algeria in 1965 and became director general of the Ministry of Foreign Affairs. Mr. Chanderli has been general manager of CAMEL, the Compagnie Algérienne du Méthane Liquide (Liquefied Natural Gas Company of Algeria).

As the first Algerian representative at the United Nations during the time of the war of liberation of Algeria and after independence, looking back to that period, what are in your view the important changes that happened over the past for, say, twenty years, in your country?

Well, it's an easy and difficult question at the same time. We made tremendous progress in a very short period. At the same time we feel that it is not enough, that we are not moving fast enough. We would like to increase
the speed. We did make progress. We are working very hard. We realize that to establish peace and develop the country is even harder than fighting the war of liberation.

Therefore, the prospects are, because of the energy of the population, because of the dynamic spirit which was acquired during the revolution - which is still living within the people - we probably will keep the pace and make more progress. It seems to be agreed worldwide that Algeria is little by little taking its right place in world affairs. Also, Algeria is more and more considered as a good example of a country utilizing all its resources for the progress of the people and the development of the country.

_When did Algeria discover its enormous gas potential?_

The gas was discovered back in 1956, but at the time we were under French administration. It so happened that the French were not very much interested in natural gas.

Nobody had realized the potentialities of our gas reserves in terms of a product to be exported. Therefore, only after independence did we take a chance and enter the liquid gas business, which requires a highly advanced technology and would surely open the gate to this new experience in transforming and exporting, even over very long distances, a product which is clean. Natural gas is not polluting. We transport it by special huge tankers over long distances. We actually cross the Atlantic to the United States with our gas. We could go to Japan. We can go anywhere with these ships because of the tremendous compressibility of this product.

_You freeze the gas._

That's right. By the way, the gas fields are about 500 kilometers from the coast.

_So you bring it to the coast and then freeze the gas._

Yes. It's brought to the coast in the form of gas and then it is transformed into liquid at very low temperatures, 160 degrees centigrade. At that moment it becomes liquid. Every cubic meter represents 600 times its volume. Thus, one ship, going from Algeria to the East Coast of the United States - if it's a ship of let's say 40,000 cubic meters - will carry twenty-four million cubic meters of gas. This would mean the consumption of a city of a hundred thousand people for an entire year. By one ship only!

_Most of these ships are Japanese. Why?_

No, not really. The greatest of the methane tankers is not Japanese, but

Willem Oltmans, _On Growth Two_
French. Many of these ships are built in France. The French are very advanced in this type of technology. The Swedish are now building a couple of ships, and the Americans and the British have some. The Japanese shipyards have been late.

*Did the French assist Algeria with the technology for developing the gas industry?*

Yes and no. They helped, but our technology really is new. The technological contributions also come from the Americans, and the British are very good in this field. They have been extremely active in the gas industry.

*What exactly happens if this frozen gas arrives in the United States? How do you defreeze it and how does it reach the consumers?*

It is a very simple operation. The gas, in order to reach the receiving line in liquid form, is put into pipes and sea water is run over these pipes. The difference between the temperature of the liquid in the pipe and the sea-water temperature makes it become gas again. Just decompress it and it's gas. It is that easy. To make it liquid, however, is a difficult operation. It needs a complicated and very expensive plant to do this job.

*I understand that you have signed some important contracts, with the El Paso Gas Company, for example.*

Yes. I was a member of the Algerian team negotiating with American companies. We signed large, important contracts with a number of companies, including El Paso. We have now committed something around thirty billion cubic meters of gas to the United States over a period of twenty years.

*This would bring roughly how much in foreign currency to Algeria?*

It's a bit difficult to say because it is a complicated affair. The returns would be really valuable only after six, seven years, because the investments are enormous. As I said before, it's a very expensive technology. The ships are also the most expensive ships in the world. Therefore, amortization takes time. But the returns will be quite substantial after a period of six, seven years.

*You are probably aware that the Club of Rome has organized at MIT a computer study of the future. Have you made any studies of future demands for gas?*

Yes, we have computers working on that, and right now we have com-
mitted as far as Algerian resources are concerned about sixty billion cubic meters a year of gas for a period of twenty years. This means that we will be able to meet these requirements for, I would say, sixty years.

Professor Carroll Wilson of MIT estimated the world energy situation in the July, 1973, issue of Foreign Affairs. Five months later, in a conversation with Anthony Lewis of the New York Times, he already changed his estimates. He realized it was much worse than he saw it in July. What is your view on these energy estimates for the future?

The energy situation is something which has to be tackled now with a seriousness that has never before existed. Modern sources of energy, which are basically oil and gas, have been jeopardized by the irresponsible management of the big international companies. I think it's absolutely crazy to waste a product which is not only a source of energy but also a fundamental raw material. Oil and gas, as you know, can be transformed into so many things. With oil or gas you can produce almost anything, including beefsteaks! Therefore, simply burning oil is a grave mistake. The companies have been assuming that this source of energy was something to last for a long time. Resources cannot last. Whatever is gone is gone forever, and will take many centuries to replace.

In the future we will have to speed up research to find new sources of pure energy, either coming back to coal with new techniques, or quickly developing nuclear research, or finding other substitutes and keeping the oil and gas mostly as a 'matière première.' I don't think that after this crisis the world will go back to the situation as it was before. The crisis will open the eyes of all those who are responsible for the welfare of the population of the world at large. They will have to consider their evolution - and revolution - in the energy problem, as soon as possible, or the world cannot survive as it is.

From your vantage point, what international body should handle this question globally?

Well, I am a member of several international organizations that have been working on this subject, but we are not powerful enough. Our efforts are not combined yet. For instance, there are a number of countries working on solar energy and some are working to utilise the energies of the sea. All these ideas have been in the air, and in the laboratories and institutes, for a long time, but nothing has been seriously considered on the industrial level. It's high time that some groups or some international group take this up and work on it very properly and very seriously.

Willem Oltmans, On Growth Two
Would then the United Nations be the ultimate body?

Maybe the United Nations, but I am afraid the United Nations is too big to begin with, and too slow, too bureaucratic. What we really need is a serious group of scientists who have the confidence of all the countries concerned and start working hard with the cooperation and eventually the financing of the producing countries. It should really be an affair involving all of humanity, because even the producing countries - eighty years, seventy years, sixty years from now - sooner or later will run short of energy. Their resources will have been used up and they too will have to find other sources of energy.

Do you realize that in the United States they discovered that if you take in one day of sunlight on the surface of Lake Erie, if it could be harnessed, that energy would be equal to all the energy consumed by Americans during an entire year? Yet, the United States spends at the moment only thirteen million dollars on research in solar energy.

I agree. It was terribly shortsighted to have been so timid in investing in research on this subject. A big effort should be made.

Do you also feel that economic growth is still very very much needed in order to speed up the development of the Third World nations?

Well, as you well know, the gap between the developing countries and the industrialized countries is getting bigger and bigger. Here again is a problem which should be faced with great speed and urgency. The rich are getting richer; the poor are getting poorer, and the danger of an explosion increases. Perhaps the violent reaction in the Arab lands in the autumn of 1973 made the energy crisis a symbol, an expression of resentment on behalf of the developing countries. The highly developed countries, which have built up this fantastically irresponsible so-called society of consumption, will have to rethink these matters.

I have the impression that Algeria is doing enormous business in dollars now - in gas, for example. Could some of those billions eventually benefit the people of Algeria?

At present, the money we earn in selling some of our natural resources is automatically invested in equipment to industrialize the country - to ‘fill the gap.’ But we will need more time and more money to succeed. Moreover, the prices of modern plant equipment, together with the high cost of training people, are also factors in the slowness in filling the gap. There must be stronger and more independent intervention from the developed
countries to help the developing countries to get on their feet. There are some signs in this area. At least, the Europeans, in their latest statements made in Copenhagen and Brussels, are indicating that, after all, they realize there should be very close cooperation between developing and developed countries. This is a first move, which should grow in importance not only between Europe and the Mediterranean countries but also in the world at large.

The transfer of technology is still a big problem in the world we live in. You know very well that we are blocked even if we were to spend the money earned in our own countries for the goals of progress - industrializing, for instance.

In the developing lands we have to pay exorbitant prices to be allowed to use patents, licenses, and know-how from the rich nations. As long as know-how is kept as a sort of exclusive property, as long as limitations are put on the granting of licenses to the developing countries, then there can be no real progress.

Whatever progress we make, the developed countries will make even more, so the gap will remain. The owners of highly technological societies will have to give up something. For historical reasons they learned faster, they made more progress than others. It's high time they shared with others, giving the less fortunate the chance to join in and build a more harmonious world community than the present one, in which two-thirds of the world population starves and the other third overeats.

Are you hopeful that under the pressure of recent events we are moving in that direction?

I have to be hopeful. You have to be optimistic, otherwise you go kill yourself. Therefore I am hopeful. However, more men - more leaders - should speak strongly on this subject and make perfectly clear that what I said would be in the interest of all concerned. The egotistic attitude of so many nations must be changed overnight.

When the nonaligned nations call more conferences in Algeria to discuss common policies, I imagine the same bloc of states will also take the initiative to bring scientists together to start laying the foundation for the kind of cooperation you have just discussed.

I am not sure that they would succeed unless the existing political tensions were out of the way.

Already in 1960, I think it was, and then in 1964, there were two attempts made under the auspices of the United Nations and UNESCO to study these
matters at length. One of these conferences lasted something like thirty days, trying to tackle the basic fundamental problem of the transfer of technology. The conference was a disaster; the developed nations made it so difficult that nothing happened. The problem is not solved yet.

But that was more than a decade ago.

Perhaps now, under the pressure of the general world situation, people will react differently. Perhaps in such a conference of nonaligned countries there could be a real discussion of these problems and we could find solutions possibly by an international body in which everybody were involved. Then, the United Nations again could play a part. Bear in mind that if the conference were called by one group or another it would be looked upon as undue pressure. If it were to be called by an international body in which every state in the world is a member, then we might have a chance.... Through UNESCO, perhaps.

The UN could even create a special body - they are always creating bodies which are absolutely hopeless as well as useless - but this one would be basic.

Professor Richard N. Gardner took the initiative to UNITAR. Maybe it should be UNITAR that takes the initiative.

To gather scientists? UNITAR is a very weak organization. They have no money. They are in my view a bunch of nice people - trying hard, no doubt, but with no strength. They could not impose a final decision. What we are looking for is some kind of group or institution capable of making decisions acceptable to everyone. They would decide, let us say, that from now on technology is to be freely transferred.

In the past - the Middle Ages, the Greek period, the Arab period of a thousand years ago - technology was transferred with no problem from one people to the other. With that attitude, the classical civilizations were rotated to one other in a fair and smooth way. Now, so-called Western civilization is keeping to its own marbles, without letting anybody else use them. How long can they go on doing that? How long can the West keep the huge population of China or India at arm's length? They have to give up this attitude. They have got to exchange, to share. I don't think the Chinese, five thousand years ago, had anybody pay for their licenses. I don't think the Greeks made anybody pay for their science, technology, or philosophy. Surely the Arabs, who passed along their own technology, together with what they acquired from the Greeks, Romans, and Persians, all the way to Europe at the time of the Middle Ages, I don't think they charged anything.
for that. It was just a normal gesture. If you know how to build a bridge, then you teach somebody how to build a bridge - without demanding money for your knowledge.

*Even the Russians have to go down on their knees more or less to get technology from the Americans.*

Even the Russians - that's right. They have to buy and to pay cash for it. And pay a lot as well. How long can you keep others on their knees imploring you to teach them what you have learned due to historical reasons? Those who are begging today were the leaders of civilization in the past. Look at the history of the Asian nations. They were highly civilized while Westerners were living in huts and wearing bearskins.

When Cordoba was streetlit, London was a village of huts. Now it would seem the other way around. London, Paris, and other ‘cities of light’ could give a little bit more ‘light’ to those who are now still in darkness.

Let us postulate that one developing country possessing natural gas wishes to produce synthetic rubber, for which one needs gas. But the technology needed to produce synthetic rubber is controlled by a number of countries which own the licenses for this production process. When you address yourself as a developing producer to the companies who own the licenses, they say, ‘We can sell you the right to use our patent and thus you will have the technical know-how to make synthetic rubber with your product, but you cannot sell the rubber anywhere but in your own land.’

In economic terms, a small plant is not economically viable within one country. It has to expand and to export.

*Is that what is happening in the developing world?*

That's what is happening. ‘You can buy our patent for Algeria,’ we are being told, ‘but you sell only in Algeria. You cannot sell to Yugoslavia. You cannot go into other markets because these are our markets. We are not going to give you a chance to be our competitor.’

Therefore, when we make our calculations and when we run them through a computer we see that a plant producing only for Algeria cannot survive economically because the consumption would be too small. This goes on all the time.

*What the hell can they do if you go out and sell anyway?*

I suppose we could go to The Hague and have a trial at the International Court. But we would lose because we wouldn't have the right to use a patent.
which is the property of some group, if this group were not willing to share its property, which is its discovery.

You see, they have got to want to share. As long as they refuse to share we are in a mess.

These companies are very angry, for example, at the Arab countries, because the Arabs are making it difficult to use their oil. But the companies themselves have for generations been refusing to share their advantages - particularly in technological know-how, training, and, last but not least, education. How much are the companies spending for education? How much are they spending in their laboratories on research? You said the United States is spending only thirteen million dollars on research for the development of solar energy - they should be spending 200 million! Thirteen million is peanuts.

Instead of bombing Hanoi at the rate of many millions a day?

Or, for that matter, spending so much money transporting weapons to the Middle East to make sure the war there will last. Wars are going on among countries that do not manufacture weapons - the weapons are being made by the developed countries.

We live in the midst of a fantastic misunderstanding which is creating a very dangerous situation. I would not like it to happen tomorrow, but we are rapidly moving toward a huge explosion because of the gap between rich and poor. Sooner or later people with bare hands will be more powerful than all the damned sophisticated weapons together. You cannot destroy one million people. You cannot destroy one billion people. You have to live with them or die!

4. Hideo Shima

Hideo Shima was born in Osaka, Japan, on May 20, 1901. He was graduated from Tokyo University in physics in 1925. He built himself
an extraordinary career with the Japanese railways and is considered the architect and creator of the world-famous Shin Kansen superfast, comfortable, and safe trains that link principal Japanese cities. In 1969 he became chairman of NASDA, the National Space Development Agency of Japan.

Toynbee told me he thought man's space efforts were a waste of time and money. We often do things, as human beings, which perhaps are not of immediate common use, but, still, they might prove some day to have been particularly useful for the future of human beings on the whole.

But many still feel fortunes are wasted which could assist as a matter of priority in helping to improve living conditions of hundreds of millions of poor on this earth.

In economic terms it might be wasteful to spend hundreds of millions on space. But, at the same time, man will gather important new knowledge. After all, we must always continue to gather knowledge, even if it might appear at first glance wasteful. Only afterward, at a much later date, will we know for certain whether such space exploits have been truly worthwhile.

In June, 1973, Prime Minister Tanaka wrote: ‘Following the successful launching of four scientific satellites since February, 1970, we are about to enter the most vital phase of space activities with the scheduled launching, beginning in the fiscal year, 1975, of a series of experimental satellites preparatory to operational satellite systems.’ Please tell us about NASDA's plans.

The NASDA's program for 1974 is shown on page 25.

The British scientist Freeman Dyson, now at Princeton, believes that travel in space in the future will be cheap. He even spoke of 'greening the galaxy,' planting trees on comets!

I consider that science fiction. After all, if one uses the word 'travel,' it should be within the context of a normal economy.

In 1977 Japan will launch its first geostationary satellite.

The ECS is indeed scheduled to be launched in 1977. Its main objectives are to establish our technological capabilities for launching geostationary
<table>
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<th>satellite</th>
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<td>1000 km circular</td>
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<td>Medium-scale Broadcast Satellite for experimental purposes</td>
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<td>US rocket</td>
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satellites by N rockets and to perform space communications experiments in frequency bands of millimeters.

*Japan initiated or participated in many international space experiments, but I noted that most bilateral arrangements are with the United States. What about such contracts with the Soviet Union?*
At present, Japan has no bilateral arrangements with the Soviet Union such as those with the United States. The exchange of space-related information with Soviet space scientists is being made primarily by participating in international activities such as COSPAR and ISTS. I noted that NASDA is at present developing the N rocket, a three-stage N...
launch vehicle. I understand its purpose is to assist in launching so-called engineering test satellites. Since Japan's space budget for 1973 did not exceed 140 million dollars, does this indicate that your space scientists still work entirely for peaceful uses of space exploration?

Yes, all our space scientists work entirely for the peaceful uses of space exploration.

With Japan's expertise in space would it be easy to switch to the military use of space? The defense of the Japanese islands, the sovereign air space of your country - is it entirely protected by United States ultramodern weaponry, or do the Japanese themselves handle part of these defenses?

We definitely have no plans for switching our space technology to military use.

When, in 1975, Japan's space activities will come into full swing, will you have trained a sufficient number of scientists? Is the interest among students in space exploration sufficient or increasing? The young nowadays seem more inclined to concern themselves with earthly matters - the social sciences, psychology, brain research, and so on.

The number of trained space scientists in Japan is increasing year by year. In 1975 the number may not yet be fully sufficient, but still the time may be near when the necessary requirements for a full execution of our space program will be fulfilled.

Your thoughts on the general concern of today's young students may be right, but interest in space exploration is high and is growing.

Since you are not only president of the space agency, but also the initiator of the world-famous Shin Kansen railways system, let us return to earth for a moment. On October 1, 1964, the New Tokaido Line (NTL) was opened between Tokyo and Osaka. By September, 1972, the trains had transported half a billion passengers without a single casualty. These trains reach speeds up to 210 kilometers per hour. One way you achieved this spectacular success was by separation of traffic, like making high-speed and slow-speed lanes on highways.

On the Shin Kansen line more than one hundred express trains run in both directions each day. This intense traffic of ultra high-speed trains can be realized only by unifying the speeds used on the rails. The Shin Kansen is fortunate enough to have the old Tokaido Line running practically parallel to it. This carries all the slow-running local trains as well as freight trains. The
unification of train speeds affords a relatively simple train operation, which is the key to our safety record.

Prime Minister Kakuei Tanaka, I understand, is proposing to further expand your Shin Kansen bullet trains to more deserted places in your archipelago.

Like most railways in the world, the Japanese National Railways on the whole are running a deficit. In highly populated areas, of course, we are making profits, but the railways in general are losing lots of money. Where the NTL trains run now, they cover densely populated areas and are therefore usually crowded.

I know, since I took the supertrain from Tokyo to Kyoto and Kobe. It was the best train I have ever been on anywhere in the world.

Thank you. But if we do as the Prime Minister proposes, we will make no money at all in the remote areas, and the construction and maintenance of such a line would demand enormous amounts of investment and capital.

Granted, perhaps during the first years, but everyone seems to agree that Japan will need and will have during the next quarter century some one hundred new cities in these out-of-the-way areas, so the passenger and customer numbers would also go up sharply.

Yes, that is the idea Mr. Tanaka has in mind, I suppose. He says only by shortening the time-distance with the use of high-speed railways can isolated areas be given a chance to develop within the overall program of building a modern nation.

I understand that the uniqueness of your Shin Kansen system is that you used for the first time multiple unit electric trains (EMU) and no longer the traditional locomotive-hauled trains. This brings us to the subject of energy. It seems, in Europe at least, that with the decrease in gasoline, public transportation is receiving new attention. How do you see the future of Japan's public transport system, especially in relation to future energy shortages?

On the Shin Kansen line we run only EMU electric trains instead of traditional locomotive-hauled trains. By doing so we avoid the use of heavy locomotives, though electric cars are a bit heavier than the others. Thus, the maximum axle load is remarkably reduced and the total train weight is also lowered. This results in lighter construction in every respect and less
maintenance as well as cheaper operations. On the Shin Kansen all the EMU’s axles are motor operated and electrically braked - most essential for high-speed running. They are still what we call dynamic-braked at present, but regenerative service braking is under testing. Once in operation this would add considerably to the conservation of energy. The EMUs are built double-headed and run back and forth with the same ease. This feature makes the construction and operation of the railway terminals quite simple.

May I end by asking for a personal opinion? When you look back at your successful and constructive life, devoted to the well-being of your country, what are your ideas about the future - especially concerning the children now in school and at universities in Japan. How do you see their life developing in the next few decades? Are you hopeful, also for them?

Even at this time of the international oil crisis, I believe in the future of our people. Our younger generation is as bright and as diligent as their forefathers were. For some time I feared that our young people might become a bit insolent and extravagant under the unprecedented rapid growth of the GNP in Japan - which was only obtained at a very heavy social and environmental cost. But now, after being shaken out of a dream of fragile prosperity by the shock of the oil crisis, I am confident that our people, especially our youth, will wisely and courageously restore their traditional spirit and successfully retain their goodwill among the nations.

Eindnoten:

1 COSPAR means Committee on Space Research.
2 ISTS means Symposium on Space Technology and Science.
5. P.S. Sagdeev

Professor P.S. Sagdeev was born in 1932 in the Soviet Union. He studied physics at the State University of Moscow, and later specialized in plasma physics. At present he is director of the Institute for Space Research of the USSR Academy of Sciences, where this interview was conducted. Professor Sagdeev has published some seventy books.

Toynbee told me that space travel and money spent on journeys to the moon are a waste.

I think that today you cannot demonstrate with a pencil in your hand that Professor Toynbee was right or wrong. The future will have to prove this. But even today one can see that some results of the cosmic era are finding practical applications. It would probably be possible to calculate the economic usefulness of, for instance, the weather service, which is partially based on the use of earth satellites. According to some estimates, which are probably not very reliable, annual savings as a result of man having learned to observe and forecast the weather with the help of a special satellite system amounts to a few billion dollars. In addition, there is an entire range of earth satellites which are of a technically supplementary character. For instance, there are now satellites for navigational purposes. You know that shipping is nowadays almost entirely guided by navigation satellites and that with the help of a relatively simple radio-reply apparatus, which is part of the equipment of almost every ship at sea, it is possible to obtain information from a satellite concerning the position of the ship with a precision of within one hundred meters. In addition, everyone knows that hundreds of millions of people on earth can receive television programs which arrive from the other side of the earth. This, too, was made possible by special American and Russian Molnya communication satellites. I am convinced that the next ten years will provide a definite answer to Professor Toynbee's remark. Naturally, this question is also receiving the attention of others, first of all those who give all their strength and energy to developing cosmic techniques. Professor Toynbee's anxiety is therefore fully understandable to all those who are engaged in these technical problems. But there are also other
aspects. There are still questions which are connected with purely fundamental scientific research. Only with the help of scientific equipment that is situated outside the earth's atmosphere is it possible to carry out a whole range of investigations which are quite impossible under conditions prevailing on the surface of the earth. This includes geophysical investigations, the study of the near cosmos, investigations of the solar system, the planets and the moon. And finally, during the last few years, and particularly this year I can safely speak about this - the astronomical investigations of major importance, carried out with the help of telescopes mounted on satellites and rockets.

*Can you tell us something more about the plans of the Soviet Union in the field you have just described and about the value that might be derived from more knowledge of the universe obtained by astronomy?*

During thousands of years living on the earth, man developed his interests and knowledge. They both expanded qualitatively and quantitatively. This is an endless process. Once upon a time man formulated the laws of nature on the basis of what he saw happening in his immediate environment. Then, gradually, he began to look farther and farther, not only along greater distances, but in a much broader spectrum both in scale and in time. This led to the formulation of new laws, which were deducted from previous ones and widened in scope. By going ever deeper into the realms of space and matter, man can expect to discover new physical phenomena, leading to new and ever widening laws of nature which might very well assist man in extending his abilities and his powers over nature.

This is the basis of our strategic concept when we formulate new plans for our space research. Using both manned and automatically controlled space vehicles, we are now able to place optical telescopes of various sizes, both gamma and X-ray telescopes or any other instruments, in the most favorable position to operate them. This is one way in which we are going to obtain a wealth of qualitatively new information about the universe.

*In view of the fact that in the seventies a large percentage of mankind is still without knowledge of the alphabet or of the most elementary facts about the earth, perhaps by broadcasting educational television programs via satellites both from the US and the USSR we might possess a unique means of making humanity at large aware of the reality in which it finds itself approaching in the year 2000.*

Naturally, the use of the cosmic communication media, of cosmic television, when seen in the aspect of which you are talking - its educational aspect.
use - is of enormous interest. Here, we should not calculate in terms of thousands of millions of dollars as regards the possible practical applications of our cosmic techniques. I would only stress that our country has a wide experience in this field in connection with the cultural revolution which took place in the USSR during the first years after the October revolution of 1917 when tens of millions or perhaps more than 100 million people who still were unable to read or write learned to do this within a very short time. And today, in our time, if we combine our efforts with the American efforts and if we use at the present level of technology both the American and our own cosmic techniques, it will certainly be possible to assist the underdeveloped countries in this significant way.

In this connection I was struck by the fact that Dr. Boris Petrov stated recently that the priorities in Soviet space research would remain directed at investigations close to our planet by means of automatic space-stations, manned stations in space, and stations in the earth's orbit; in other words, space investigations in the first place for the benefit of mankind?

I would think it correct if our doctrine in the cosmic field were formulated as follows: On the one hand in our flights to the moon, Venus, and Mars, we aim at purely scientific objectives. On the other hand our investigations close to the earth are directed at finding answers to scientific problems and problems whose solutions can find practical application and of which I have already given some examples.

In the future, could space close to the earth be used for the benefit of mankind?

Naturally. In the first place I have talked about meteorological satellites which are used for determining the weather. In addition, I mention stations in space which act as astronomical and geophysical observatories. And, finally, I may add a new direction in space research, which is, that we are also now using the cosmos to study the surface of the earth itself. The importance of this type of space research is best explained that in so doing we have obtained a brand new tool with which to observe our environment, our natural resources, and, in general, the results of all of man's activities on earth. What is called a synoptic, repetitive, and rapid way of observing various phenomena on the surface of the earth now provides scientists, planners of resources, managers or environmental control personnel, and many other specialists with information that was previously unobtainable and which our predecessors never dreamed would be available some day.

Satellites are able to collect data in the most remote places and corners of
the earth's surface. Thus, we can now establish global monitoring networks for a large variety of observations.

I have no doubt whatsoever that the use of satellites for the purpose of guiding man's activities on earth in one way or another will affect all facets of human life in the future.

*Professor Dyson of Princeton University mentioned to me the possibility of planting trees on comets.*

In my opinion these are, for the time being, scientific fantasies, science fiction.

*Professor Dyson also talked about space travel becoming cheaper. Or was that science fiction too?*

This is no longer a question of science fiction but of economics. We will probably be able to give an answer to this question during the next ten years, especially when we have the use of cosmic equipment which can take off from earth many times and always return to earth - the so-called shuttle.

*A shuttle is a kind of platform in space?*

I am referring to that part of the shuttle program in order to answer the question to what extent it will be economical to take off and to return to earth many times by using the same equipment.

*By the time this book is published, Soviet and American astronauts will most likely have achieved a link in space between their space stations. For the first time, as was observed by the New York Times, it will be possible to listen from earth to Soviet and American voices coming from space simultaneously. Could we call the first summit meeting in space?*

I do not expect any particularly important scientific discoveries from this first flight. It seems to me that in this first stage our most important task is to show that all technical operations which will be necessary in the future to operate space stations will be possible as routine operations, and that they can be carried out in a quiet, businesslike atmosphere. If this program is continued, flights during the next few years could probably be used for undertaking certain very interesting and possibly even historical scientific experiments.

*It is certainly a favorable development from the point of view of a very small country, such as the Netherlands, when scientists of the superpowers aim at closer cooperation.*
As I see it, it would be logical for this cooperation to be continued.

_I hesitate to join Professor Dyson in his dance of scientific fantasies of the future, but are you not inclined to believe that man might be able to live on other planets?_

One of the major problems is that of weightlessness. As the last few prolonged flights have shown, first by Soviet cosmonauts and now by the Americans, particularly in Skylab, it will be possible to combat weightlessness. But there is also a whole range of other problems that have not yet been solved and, in my opinion, we are still far from finding ways of transferring life to other planets or of creating conditions for prolonged stays on other planets or in the cosmos in general. This difficulty may be with us for a long time.

_American scientific circles are wondering, for instance, if it would be economically justified to build large cities in space?_

Such questions are, of course, being considered, but only from a point of view of science fiction. Looking at the problem realistically, we would first like to see how our American colleagues will solve an earthly problem such as their diminishing energy reserves.

_The New York Times of April 14, 1972, stated that your country is launching three times as many spaceships as the Americans. How is the average reader of the Times to interpret this kind of information?_

It appears to me that this is a question of strategical nature. You can make one rocket and put as much money into it as you would need for making three rockets. And with some degree of probability the three rockets may yield certain scientific results. Up to the present it has not yet become clear which method is the best, to make one very expensive rocket or three cheap ones.

_A reaction of the reader of the Times to this news item was: What are the Soviets doing in space? Are they ahead? Are we far behind? What is your opinion when you compare the programs of the USA and those of the USSR?_

The problem that plays the most important part for a scientist in planning his work is not who is ahead or who is behind. It is in the nature of science to develop itself over a wide range of problems, sometimes on a parallel course and sometimes on a conflicting course with colleagues elsewhere. But, mostly, scientists complement each other's investigations. It is quite a common situation that one scientist or team of scientists is ahead in one field, while colleagues have forged ahead in other branches of a cer-
tain science. The main point is to have a free exchange of results and findings that were obtained in the course of research everywhere. I am fully confident that scientific progress in our respective countries, the US and the USSR, will be influenced strongly by each other's accomplishments and findings. After all, success on the one side will mean success for the other side, because is it not so that in essence science and research is one indivisible entity?

*Your space research is also concentrated, I think, on the search for a new perspective in the physical processes emanating from the energy of the sun. Has this research anything to do with the way in which energy may, in the future, be obtained from sunlight?*

We have a special program devoted to the study of the processes that are taking place on the sun and their influence on the outer atmosphere of the earth - its climate and weather. The program consists of special satellites with high-apogee orbits, which means that they travel some tens of thousands of kilometers away from the earth. We launch such satellites once or twice a year. They are equipped with an apparatus for registering the changes which take place on the sun's surface. We study, for instance, solar explosions and the radiation from these explosions. There is also equipment on board for the direct registration of processes taking place in the outer atmosphere of the earth after these explosions occurred.

*Will man be able to succeed in obtaining energy from the heat of the sun in the near future?*

In a way we are already using the energy from the sun today by means of sun batteries which collect part of the light energy rendered by the sun. What other examples can we mention? Once again, at a purely science fiction level some other possibilities are being considered by Professor Hannes Alfvén from Sweden. The sun radiates energy not only in the form of light, but by producing large currents of plasma in space. These currents create something like a solar wind. One idea is to make with the help of a spaceship a kind of sail which might be ‘fed’ by the energy of the current produced by solar wind. But the density of this solar wind is very low, so the sail has to have a very large surface. We might call it a sail for using the electromagnetic fields. If it was possible to collect the energy of the solar wind, it would also be possible to use the necessary energy for distant interplanetary flights.

Our Academy of Science has a special council which occupies itself with the problem of utilizing solar energy. This problem involves the concentration of large amounts of sunlight with the help of special mirrors. There are
also small sun-batteries made in serial production. They can be used in places such as mountains, in southern regions where there is a great deal of sunlight, or where there are no other sources of energy available. It is possible to set up these small installations in such places. In fact, there are installations already in existence used by expeditions and by shepherds looking after herds of cattle in the mountains. Installations are also made for the desalinization of salt water, for instance, or in places where we have salt water lakes. Some scientific institutes in Central Asia are working on this problem.

Is it your impression that the current energy crisis has become a permanent problem facing mankind?

I think the problems that have recently arisen are temporary and that the serious difficulties will only arise in some twenty or thirty years. It is clear that it will be necessary to solve the problems that are connected with the use of nuclear energy, and this will have to be done in entirely different ways from what has been done so far. The sources of nuclear energy will have to become our main sources of energy in the future. The question that is being considered at present is, Which of the two kinds of nuclear reactors will predominate? Will it be the breeder reactor or the fission reactor? Or will it be the reactor which is based on fusion? At the moment it is hard to give an answer to this question. At least another ten years will probably be needed before the final answer can be given. At the moment the breeder is probably the best answer to our requirements, but up to now there has not been a single experimental reactor that has been in operation for a sufficiently long time. The next five years may also show that a thermonuclear reactor meeting all the requirements can be built, although there are still many difficulties to be resolved.

Are young people in the Soviet Union interested in astrophysics; do they choose the study of space exploration in significant numbers?

Yes, astrophysics enjoys a warm interest among our students, and lectures given by well-known astrophysicists always draw large audiences. Just as, let us say, some thirty years ago nuclear physics attracted the students' interest to a large degree.

I should like to say a few words on the question as to why scientists consider it important that astrophysics receive our attention. This question has two main aspects, one of which is philosophical. It goes back to our ancestors, to whom it never really occurred that by looking at the stars they would receive information useful to mankind, but who simply asked
themselves: What is happening out there? This philosophy was best expressed by Henry Poincaré when he said that when looking at the stars through a telescope, man sees what is happening on the stars. He begins to understand his own size and feels how small our globe is and how large and grand the cosmos is. The second reason for our deep interest is ultimately, of course, of a certain practical nature. Nowadays, every year - or perhaps I might even say every week - we are faced with a new discovery in the field of astrophysics. It appears that there are new cosmic objects that are displaying completely incomprehensible characteristics. We may therefore ask ourselves whether among the new cosmic objects which we are discovering all the time there may not be some kind of object that cannot be explained in terms of the laws of physics discovered here on earth. There may be cosmic bodies in which there are entirely new forms of energy and physical processes at work and in which gigantic amounts of energy are produced. After all, a few years before the actual laboratory work was begun, it was astrophysics from which the conclusion was drawn that thermonuclear reactions do exist. The well-known conclusion regarding the necessity of the existence of thermonuclear reactions out among the stars was drawn particularly from the conclusions of astrophysics, although even before this, astronomers had come to the conclusion that fuels such as coal would not be sufficient for maintaining the extreme heat of the stars for many thousands of millions of years. Accordingly, the question arose whether there could not be some energy source similar in strength to that of nuclear energy. In the same way it is quite probable that astrophysics will now give us some new information which may also prove to be useful practically, although perhaps only after many years.

*In 1971 a conference was organized to discuss signals coming from other planets.*

This conference was dedicated to the question whether it was, in principle, possible to look for signals coming from other intelligent civilizations, and if so, in what form. But the question as to whether there have been signals has not yet been seriously discussed.

*And what about flying saucers?*

We have read reports about them in newspapers.

*What is your own chief interest in space travel?*

I used to work in research connected with the problem of controlled thermonuclear reactions. The work in this field is taking place in laboratories

Willem Oltmans, *On Growth Two*
on special installations in which very large magnetic fields are used to create a very hot, dense matter called plasma. The object is to achieve temperatures of 100 million degrees, at which thermonuclear reactions become possible. Up to now, scientists have reached, in their laboratories, lower temperatures of around, let us say, twenty million degrees. These are now being studied at special installations. While studying certain characteristics of plasma in such installations, I gradually became interested in the question of whether it might be possible to reconstruct, to create conditions which we find in cosmic plasma with the help of analogous installations in laboratories. A number of this kind of activities are going on in our institute. The experiments simulate the process taking place in special aerodynamic tubes, tubes in which a hot current of air is blown along models of various types, let us say, wings. In the same way a current of plasma, instead of air, is blown through special tubes at very high speeds - some hundreds of kilometers per second. However, the object around which the plasma is flowing is not the wing of an airplane or a complete airplane, but a cosmic body, such as, for instance, the earth surrounded by its own magnetic field, the moon, and so on. In so doing it became possible to find a mass of analogous details and to transfer the standards and methods that had been developed in the field of thermonuclear synthesis to the phenomena of cosmic plasma. It also became possible to compare these phenomena with the observations which were obtained from earth satellites and cosmic rockets.

6. Jorge A. Sabato

Professor Jorge A. Sabato was born June 4, 1924, in Rojas, Argentina. He studied in Buenos Aires and Birmingham, England. He founded, organized, and directed the department of metallurgy of the Argentine Atomic Energy Commission. Professor Sabato is corresponding member of the Institute of Metals, member of the Fundación Bariloche,
and member of the Club of Rome. A number of papers on metallurgy, nuclear metallurgy, physics, and the relationship between scientific policy and economic development have been published by him. He is consultant to the Organization of American States, the Interamerican Bank, the Andean Pact, and other international organizations.

In Argentina we have organized a team to study the ‘problématique’ raised by the Club of Rome in their first major project, *Limits to Growth*. The team is under the leadership of Professor Amilcar Herrera, a geologist and a specialist in natural resources. I myself belong to a Latin American advisory committee together with Dr. Helio Jaguaribe, from Brazil, Dr. Victor Urquidi, from Mexico - both of them members of the Club of Rome - Osvaldo Suntsel, from Chili, Enrique Oteiza, and Carlos Mallman, from Argentina. Dr. Herrera is a member of the committee and the executive director of the project now known as A Latin American World Model. The team under the direction of Herrera is sponsored by the Fundación Bariloche, a private, high-level, interdisciplinary institution in Argentina organized to undertake graduate studies in disciplines such as the study of natural resources, sociology, mathematics, and music. The Fundación Bariloche is unique in Argentina and in Latin America.

*When and how was the committee organized?*

Our committee was organized in 1971 during a meeting in Rio de Janeiro sponsored by the Club of Rome. We had already seen the first draft of *Limits to Growth* as it was presented at the Club of Rome meeting earlier that year in Montreal. When we learned of these efforts, some of us Latin delegates to the Montreal meeting got together and proposed to the executive committee of the club to hold a special meeting in Rio to consider the point of view of the underdeveloped nations in these matters studied by Forrester and Meadows. Our very first impression was that the *Limits to Growth* study was overcharged with points of view of the developed world. We felt something was missing - the views of the developing world.

*The developing nations....*

Indeed. We then organized the Rio meeting of 1971, where some twenty Latin American scientists from various nations were present to analyze the Meadows report. It was decided that a special Latin American team would study the problématique tackled by the Club of Rome.
And your approach to these problems was a different one?

The difference was an essential one. The main hypothesis behind the Meadows report was that there is going to be a global crisis, a world explosion, fundamentally due to the way in which man is exploiting his natural resources. From there on follow several conclusions, as you well know, so I will not elaborate on them here. The Forrester-Meadows approach could be summarized as follows: ‘We live on one planet. If we do not take care of this spaceship earth, it will explode.’

Our own way of judging the future global crisis is that on the one planet there are in fact two worlds. The spaceship earth will eventually explode as a consequence of the collision between these two worlds.

If a world catastrophe is not going to happen we must change the present situation of one planet, two worlds to one planet, one world. If the developed world continues to use eighty percent of the earth's resources - most of which belong to the underdeveloped world - we certainly will have that explosion, due to the fact that a minority of mankind is exploiting the majority.

Therefore, as seen through Latin American eyes, the disaster is not going to be caused by ecological factors. It will be a result of ecopolitical reasons. The combination of the stupid exploitation of resources plus the fact that three-quarters of mankind already lives in the type of the world that Limits to Growth describes for the future, will eventually lead to a worldwide crisis. It is interesting to observe that the Meadows report foresees - in forty or fifty years - a drastic shortage of water, air, housing, education, and so on. But this is exactly the state of the world for about two thousand million persons already today! Right now, not in forty years, two thousand million people have insufficient water supplies or no water at all. They live mostly without sanitation, education is miserably lacking, and so on and so forth. The catastrophe forecast by Meadows is already here.

All of a sudden, the people of the rich world have become aware that something very bad is going to happen. Perhaps I am being brutal to say these things, but take the problem of pollution. My own cynical ‘Oscar Wilde definition’ on pollution is that the rich began to talk about pollution when pollution became a danger for their children. What they forget is that hundreds of millions of children already live amidst the worst kinds of pollution everywhere. Go and visit any one of the -

I just crossed Southeast Asia and India -

OK, go to India. You do not need to look into the future. Everything is already there!

Willem Oltmans, On Growth Two
But the underdeveloped world is also a sharply divided world. A minority live in luxury in the cities, in splendid and beautiful residential areas, while at the same time these cities are surrounded or immersed in a world of misery, of hopelessness.

Our team decided, therefore, that our approach to the problématique, to the approaching catastrophe, should be the following. The crisis foreseen is going to come if this inequal state of distribution of wealth and exploitation of resources remains. Mankind as a whole will not accept this anymore. We are going to have a succession of political crises, leading quite possibly to the destruction not only of natural resources but of human resources. Hundreds of millions of people will sooner or later decide to get what they need. Let me give a simple metaphor. When the barbarians ‘decided’ to break the Roman Empire, they were not actually guided by logic. But they arrived at a political decision and invaded and destroyed the unique civilization that was Rome. My impression is that the same might well happen in connection with the ‘barbarians’ of today - the two thousand million people in the world who can no longer accept prevailing injustices.

Back to Rousseau....

Exactly. It is this way of looking at the problématique that makes the Latin American World Model different from the MIT one: The central objective of our model is not to show what could happen in case the present world trends continue, but to propose a possible way to attain, within a reasonable period of time, say a hundred years, the goal of a humanity freed from the restrictions which at present hinders its development in the widest sense. And the model intends to demonstrate that this goal is compatible with the total resources available to mankind - as long as they are rationally used.

The basic principle is that every human being, by the simple fact of his or her existence, has an absolute right to the satisfaction of those needs - food, health, housing, and education - that are essential to full and active incorporation into his or her culture.

How is your model built?

Our model is built around three basic assumptions related to the most central aspects of social and economic development: First, the ultimate goal is an egalitarian society, both socially and internationally. Second, production will be determined by human needs and not by profit. Third, it will be a nonconsumer society, that is, a society in which consumption is not a value per se. This is of course an utopian world, but in the good sense of the word: a prospect for mankind both desirable and possible.
What about resources?

The resources we analyzed were natural resources, capital, and land, and we studied the question of whether it would be possible to satisfy the needs of ten thousand million persons or thereabouts in a time horizon of about one hundred years. Therefore, our main objective is to consider the question of whether the basic needs for all mankind could be satisfied over a period of one hundred years from now. Some of the preliminary results are most interesting. On the question of natural resources, for instance, our answer is different from the conclusions drawn by the Meadows team at MIT. We do not think that in the coming period of one hundred years any natural resources will be lacking. Take mineral resources. We do not agree with the Limits to Growth study that there are going to be scarce minerals during these hundred years if already available technology is used.

There will certainly be growth in technology as well.

Exactly. We could, however, even without a future technological breakthrough, and with the technology already available, say that there is no problem with energy as far as we can analyze.

In other words, the present difficulties in Europe, Japan, and the United States are the outcome of a political conflict.

The present energy crisis is a good demonstration of our main hypothesis: it is clearly a political crisis and not a crisis produced by shortage of resources. The central issue is power - not energy-power, but political power - and the only possible answer is a political one, namely a new distribution of power among nations.

What about pollution?

We have likewise studied the problems concerning pollution, and concluded that all pollution problems can be met effectively, spending money, of course. We have figured out that about three to five percent of capital cost in each capital investment would be needed to fight pollution. Therefore, pollution should be brought back to the problems of cost. Except one form, which is thermal pollution, the sole form that is irreversible, as is shown by the second principle of thermodynamics. All energy degrades. The main question to figure out will be to what extent thermal degradation will cause problems. So we analyzed a submodel of the atmosphere based upon a hypothesis of energy consumption a century from now. We studied the dissipation of this energy into the atmosphere to see what kind of effect this produced.
And food?

We studied the food situation resulting from land-use problems and achieved most interesting results. There should not be a scarcity of food supplies if we use the technology already available now. It is who owns the land, the matter of property, that has to be changed forthwith. We are not faced here with any technical barriers. What we do face is once more a deep political problem. If the land were utilized, not to make money by raising rent from miserably poor farmers; if the land of this earth were divided and used in a socially responsible way, we would not be faced with the catastrophe that may announce itself shortly.

If we could intelligently exploit land as the property of all mankind - a rather strong proposition from the political point of view, as you can well imagine - it could produce all the food necessary for our Utopia.

Another fascinating problem we studied is the demographic question - population. Some years ago, people in the developed world began talking about the world's population problem - in the underdeveloped world of course. If you yourself live in the underdeveloped world, naturally you become rather suspicious if someone coming from the developed world feels it necessary to give you advice! In particular, one becomes suspicious listening to a man like Robert S. McNamara.

The man who first ordered the destruction of Vietnam and then turned super Santa Claus.

Exactly. So one begins to question why -

-all of a sudden, the rich are so concerned.

Yes. As a matter of fact, we first became suspicious years ago. We are satisfied, that at present, at least, we in Latin America are fully capable of presenting our own models when discussions on the future, as originated by the Club of Rome, arise. We have a complete model of world problems now, consisting of several small models linked together. We have a model for food. We have a model for land. We have a model for energy. We have a model for population. The last is of particular interest since it stresses, as I told you before, to what extent the so-called population explosion is linked to political causes.

What would be your conclusion, since all problems end up by being political questions, or semipolitical, at least?

Each of us, I think, has his own image of how these problems are going to be solved or not solved. We do not consider it the purpose of our work to

Willem Oltmans, *On Growth Two*
propose or suggest solutions. We are trying to point out, among other things, that one cannot describe the future of mankind by forgetting what kind of world we are living in from a political point of view. At the same time, we don't like to give the impression that we are interested only in the political origins of our problems. We at Bariloche consider it to be a rather naïve approach in any analysis of the problems of mankind to forget or neglect the political circumstances in which man will find himself during the next few decades. This is, for instance, the reason we prefer to talk about ecosystem, since it means the relationship between the ecology of nature and that of humans. Ecosystem means man in his organized society, as human being, the interrelationship between the ecocycle and the human-cycle, how they interact with one another. It is nonsense to talk about natural resources as an entity without remembering that natural resources are produced, are in a sense invented by man. Man made copper. Prior to the discovery of electricity copper was a material of few uses, not very important. But when man invented electricity, copper, which was then a resource available in ‘unlimited’ quantities, was transformed into a scarce commodity. The same happened to aluminium. If one would be willing to pay the price in energy to use aluminium instead of copper, one could forget about copper for electrical transmission and use aluminium instead. As you know, over the next hundred years our resources of aluminium are virtually inexhaustible.

*That sounds like Herman Kahn.*

No, this is not Kahn. This is a fact. Check with anyone in the world studying natural resources.

*Overall, you seem to me considerably more optimistic than the authors of Limits to Growth.*

Yes and no. In one sense I am optimistic. If we count and use our resources intelligently, we will have plenty. If we do not, then of course the catastrophe will arrive.

‘*Use our resources intelligently...’ Is what you mean to say, ‘Use them intelligently from the political point of view?’*

Yes. Right. It is actually a way of saying we must not forget that this poor planet contains not one, but two worlds, and that a global crisis will certainly come if the values and productive systems of the earth are not rationally organized in order to be intrinsically compatible with its ecosystem.
7. Emmanuel Ayankanmi Ayandele

Professor Ayandele was born on October 12, 1936, in Ogbomosho, Nigeria. He studied at the Nigerian College of Arts, Science, and Technology, at the University College of Ibadan, Nigeria, and at King's College, University of London. In 1972 he became dean of the History Department of the University of Ibadan. He is a member of the Club of Rome and has written numerous books, among them, *African Exploration and Human Understanding* and *The Educated Elite in Nigerian Society.*

Do you agree that this symposium of the Club of Rome is at last turning away from statistics and computers toward the more basic human problems of this earth: namely, becoming aware that there is no problem as urgent and worrisome as that of the rich and the poor?

Yes, but before we go into this question let me make some remarks about the Club of Rome, of which I am happy to be a member. Since I was admitted to this club about two and a half years ago, I have been impressed by several concrete facts about it.

First, as a historian I am impressed by the fact that so many people who live in entirely different parts of the world are so aware of the huge problems which have arisen out of man's triumph in science and technology. In other words, that these members of the Club of Rome have not been enslaved by achievements which obviously have in some ways brought men material comfort. Of no less importance, I feel, is the fact that club members have been far more fair-minded than their predecessors. When I say their
predecessors, I mean not the imperialists, because that term might be too subjective, but, rather, the colonial masters, whose conceptions of Africans or inhabitants of other underdeveloped parts of the world was that they were organically inferior; that therefore they did not have to be consulted in any consideration of global human problems. The Club of Rome is a very important organization which recognizes this point. Club members realize that the problems involved in the problématique confronting humanity are basically human, and that the solution to these problems should be obtained not only by tapping the wisdom and the resourcefulness of people from developed parts of the world, but that those from the underdeveloped areas should also be consulted.

As a matter of fact, it is more than consultation. Within the Club of Rome we have always consulted and deliberated on the basis of perfect equality. We feel a sense of oneness. In our midst, spontaneous, brotherly exchanges take place. We attack issues for what they are, completely oblivious of geographical, racial, or ethnic labels. For me this is a most important fact. Not because I am a moralist, although I am by nature moralistically inclined, perhaps as a result of my upbringing, but also because my conception of history, my understanding of man, is such that I hold it as something more than a hypothesis - in fact it is perhaps even a maxim - namely, that man is basically man, no matter where he is, and that the differences which have been imposed on him are differences that are basically geographical and ecological. I believe that the accident of color or ethnic label is absolutely irrelevant and does not constitute a challenge to the validity of the biological equality of the human race.

The Club of Rome - and I discovered this when I went to the first meeting I attended in Montreal in 1971 - behaves like one community in attacking world problems in scientific terms. This seems to me very important, and it conveys a message to other international organizations. There are no constraints in this club. If you take any other professional organization, by the very nature of the different professions, they often are subjective and discriminatory. Not to speak of United Nations circles, which are a hotbed of political intrigues and the rest.

I think that the outside world should be told that the Club of Rome is an absolutely ‘nontribal’ organization, in the sense that it has no prejudices I know of.

As Harvard psychologist Gordon W. Allport once wrote, ‘It is easier to smash an atom than a prejudice.’

Exactly. What also should be told is that the members of the club seem to
be globally made. Global in the practical sense, trying to more or less exemplify a kind of world-citizenship concept. One is reminded of the Stoics in the third century prior to the Christian era who claimed originally to be citizens of the universe. Without intending to romanticize them I think members of the Club of Rome are citizens of the world. You can ascertain that the various problems they have been deliberating over the past five years are not regionally oriented but treated with genuine universal concern and given a global conspectus.

When we speak of the ‘predicament of mankind,’ the first slogan used by the founder of the club, Aurelio Peccei, we identify one of the basic problems that confronts mankind - that of resources. Should one be selfish in this age, and should one wish to satisfy one’s appetites and exploit the resources the earth holds in the most callous manner? Should people choose to multiply in such a way that there will be more people than the world could feed? How are we to bring about the Green Revolution? These are some of the basic problems which concern all peoples irrespective of religion, color, or clan. The Club of Rome has been seeking to tackle these problems. In their efforts they don’t just deal with the present generation. If they were selfish people, they would not be spending so much of their time thinking of the future, when they would long have been gathered to their forefathers.

*Aurelio Peccei once told me how he liked doing something constructive for his grandchildren and for children in general.*

This kind of altruism you do not really find in many organizations. It also is quite untypical of the behavior of man throughout history, as far as I know.

*In my view, this is in a large part owing to the unique leadership and personality of Aurelio Peccei.*

I think our deliberations in Tokyo, with the participation of experts from outside the club, on the energy crisis and the question of food production in the world have been extremely useful. For the Club of Rome, being basically a think tank, does not express opinions based on abstractions, but ones based on empirical data, data collected from all parts of the world.

You are right - I am really overwhelmed at times by the passion with which Aurelio Peccei is pursuing this most desirable cause.

*You realize he would not want any credit for his endeavors and probably dislikes us even to discuss them.*

Perhaps. But he has been the brain of this movement.
Have you been discussing the Club of Rome with your students at Ibadan?

No, and this is deliberate. One has to watch one's timing. People in the developing parts of the world are presently in the stage where whatever program you might want to bring them, you must first be certain that it is something they would readily buy. The language and message of a study such as Limits to Growth, commissioned by the Club of Rome -

- would sound like Chinese to most people in Africa.

Precisely. This study would need considerable explanation if it is to be successfully presented in Africa. It would be somewhat illusory, like missionary work, to introduce this kind of language and this kind of message in our part of the globe. Political instincts in Africa are very strong indeed, after having been subjected to colonialism and imperialism for so long. Naturally, Africans are bound to suspect any organization that is directed mainly by people from the developed parts of the world. Nor should this be surprising. Even in some parts of the developed world there are people who suspect the Club of Rome on ideological grounds. For instance, some see club members as conspirators against their affluent class. So you can well imagine how most Africans would react to the picture in Limits to Growth presented by rich Westerners. The message would never reach the grass roots.

At this moment, and I have given the problem a lot of thought, I think the best way to present the programs of the Club of Rome to Africa is to try to interest political leaders first, and explain the issues of universal concern to them. This does not mean - let me stress this - that African audiences would be as naïve as some people think they are. We are gifted with incredible capacity to understand issues, provided you speak to us in the right language and at an appropriate time. It would be a mistake to rush the Club of Rome's message to audiences through the popular press, prior to clearing the ground most carefully. For without proper preparation the masses would reject the Club of Rome as a neocolonialist plot, the more so because the club is made up of businessmen, scientists, and policymakers from other parts of the world.

I could not help but think of the present famine in central Africa when I saw the overloaded dinner tables and buffets in the top floor of the Imperial Hotel in Tokyo, where those attending the Club of Rome symposium were eating crabmeat until it came out of their ears!

Exactly. That illustrates to you once more the gaps in stages of development between those who discuss the predicament of mankind, as the

Willem Oltmans, On Growth Two
Club of Rome does, and those who live the predicament of mankind, as the inhabitants of the sub-Saharan are doing right now, experiencing bodily the cruel hunger that prevails in those areas. That is, by the way, the point which the Polish delegate to the symposium, Professor Adam Schaff, made repeatedly.

Seconded by his Polish colleague, Josef Pajestka, and numerous Latin American delegates to the conference.

You see, I remember how brochures about family planning are often mailed by well-intentioned foreigners to us in Nigeria, warning us that the tropics of Africa may soon be overpopulated. But the Nigerian readers are aware of the facts. And since these alarming sounds for the most part come from abroad, Nigerians - indeed, Africans - are liable to look upon such talk as a white man's conspiracy. They know their mathematics - world population country by country in relation to geographical and physical sizes. They would simply say to you, for example, ‘And what about the Netherlands?’ since they have been told that Holland belongs to the most densely populated areas in the world.

But the Dutch are being told by the Dutch that their present population of well over thirteen million should be brought down to ten million at the most. If Limits to Growth were introduced rudely into African public opinion -

- it would have an adverse effect.

Right. Africans would say, ‘Look, the white man does not want us to multiply. But historically, he has multiplied, hence the dispersal of the British to populate other parts of the globe - North America, South Africa, Australia - because Britain became overcrowded.’ The story might be different, but this is how Africans would, naturally, see it. Nigeria's population is estimated at about sixty to sixty-five million, or somewhat the same as Great Britain. Yet, we have in Nigeria four times the territory of England. Our people would not be prepared to accept that they are in such trouble as that predicted by population alarmists like us members of the Club of Rome, whose judgment is based almost exclusively on the white man's milieu.

The attitude of Africans to the overpopulation bugaboo cannot be understood except in the context of their philosophy of life in relation to the traditional milieu. What is the philosophy of life in indigenous Africa? First of all, the average man does not believe that he is poor. African farmers are always assessed at the standards of those who do the assessing. The belief that African farmers are wretchedly poor is a product of the thinking of the

Willem Oltmans, *On Growth Two*
rich men from the affluent countries, who are not necessarily as happy as the so-called poor people they are commiserating over. I would even assume that many an African considers himself considerably qualitatively and spiritually richer than a lot of people in the so-called rich nations, their literate counterparts.

*They feel that they have a future to work toward in building their nation up to modern standards.*

If the ‘they’ you are alluding to are the educated elite, I would say yes. But I have so far been referring exclusively to the unlettered masses, who are still in the majority and are not yet much contaminated by Western habits and notions. As an educated African I subscribe to the credo of your question. But the man in the African countryside does not necessarily subscribe to it. This is the point I am making with due emphasis. The Africans who worry about family planning are intellectuals like myself. But they are the ones who do not need to be preached to or lectured at about it. We know the advantages of family planning and endorse the program. But the common man would look at you literally confounded and out of his wits if you were to tell him to plan his family, and plan it small; he would doubt your sanity. Behind the common man's attitude is the deep belief that a child is a blessing from God that should not be killed or rejected. It is as simple as that. And do not charge him with being primitive since, after all, this is the Roman Catholic view of life! The concept of family planning touches on the sacredness of life itself.

The unlettered African's reasoning is perfectly logical and quite in order. Around him is plenty of land, plenty of land more to be cultivated: The more children you have the more hands are available to help till the land. Unlettered Africans still hold on to their traditions and religious concepts. And I repeat, they do not feel they are so poor, as people in London or New York might consider them to be, in a milieu in which they are convinced that the white man is not a civilized being.

Nevertheless, some family planning groups seem to be active in Nigeria.

My university, the University of Ibadan, has been studying family planning for some years, asking the population questions we have been examining in the Club of Rome. The concept of family planning, sponsored, I think, by some American foundation, has been slowly gaining in Nigeria as well, primarily among the educated elite.

*In your view, what would be a program, or perhaps even several areas, in*
which the Club of Rome could begin to undertake special studies with their famous model method aided by computers, on the African continent?

I might start with a personal academic prejudice, arising out of my professionalism as an historian. It is that I do not believe that man can be computerized or resolved into mathematical components. Far more than we care to know, man is complex and unfathomable, beyond the ingenuity of the computer. Methodologically, the model approach, which has become the passion of a group of scholars, is based on assumptions to which man is not central. Need we be surprised, then, at the disastrous fallibility of man-designed machines to resolve basically human problems?

The point I am making is that no computerization, or hair-raising alarms, or models theoretically rational and valid, can solve the problem of the threat to human resources, so-called overpopulation, and so on, until man's being is first changed to the point where he would eschew and renounce tribal, racial, and imperial instincts; megalomania, avarice, incorrigible selfishness, and so on.

With particular reference to African problems, I am not persuaded that the models of system dynamics are presently of any relevance, except remotely in potential terms. For example: related to the vast mineral and sylvan resources with which Africa is endowed there is no doubt whatsoever that the continent could sustain an even greater population. Since industrialization, is only embryonic, pollution is a nonexistent problem. The elusive search for a higher-quality life and the longing to escape from the tyranny of a crass materialism, such as the Japanese are hankering after, are remote phenomena in an Africa still predominantly agrarian, traditionalist, and illiterate in the Western sense.

Studies of African problems demand a different approach and a different methodology. But what is the African predicament? It can be summarized as follows: How to employ technology for maximum economic growth and a better-quality life without these being accompanied by the dehumanizing social problems that afflict Europe and North America; how to retain in the course of the process of economic development and industrialization the spiritual properties of indigenous life. All this may sound unrealistic, or like wanting to eat our cake and have it too....

But the African predicament is compounded by the incubus of neocolonialism, the logical and murderous successor of colonialism, according to which Africa and Africans continue to be systematically exploited and milked by the ‘developed’ or ‘advanced’ peoples of the world.
8. **Teng Hsiao p'ing**

Vice-Premier Teng Hsiao-p'ing was born in 1904 in Kwangan, China. At the age of sixteen he followed in Chou En-lai's footsteps and went to study in France. It is here that the two men met for the first time. Teng returned to his country via Moscow and later joined the guerrillas against the Kuomintang, led by Chiang Kai-shek, who, in 1938, were conducting operations in Kwangs province. In 1935 Teng already had taken part as a political commissar in the legendary Long March led by Mao Tse-tung toward the north of China. Following a swift career in the top leadership he became, during the Cultural Revolution, a favorite target for demonstrators, who accused him of being a pleasure-loving potentate who ‘overflows with evil.’ He was accused of devotion to bridge, and of ordering delicacies from a Peking restaurant.

In 1967 he supposedly confessed to Red Guards that he was guilty of harboring counterrevolutionary thoughts. On April 12, 1973, he unexpectedly appeared in public in Peking at a state banquet. In April, 1974, he suddenly arrived in New York to address, as Vice-Premier of the Chinese People's Republic, the special session of the United Nations on natural resources as assembled by President Houari Boumédiene of Algeria.

The author and his publisher made every effort through the Dutch Ministry of Foreign Affairs, the Dutch Embassy in Peking, and the Chinese Embassy in The Hague to obtain one or more interviews with Chinese officials for this series, but Chinese reaction was negative. Nevertheless, I felt that their point of view should not be absent in this symposium. Therefore, I have included the complete text as issued by the United Nations. Mr. Teng's speech was delivered April 10, 1974, to the special session of the UN General Assembly.
The special session of the United Nations General Assembly on the problem of raw materials and development is successfully convened on the proposal of President Houari Boumédiene of the Revolutionary Council of the People's Democratic Republic of Algeria and with the support of the great majority of the countries of the world. This is the first time in the twenty-nine years since the founding of the United Nations that a session has been held specially to discuss the important question of opposing imperialist exploitation and plunder and effecting a change in international economic relations. This reflects the profound changes that have taken place in the international situation. The Chinese government extends its warm congratulations on the convocation of this session and hopes that it will make a positive contribution to strengthening the unity of the developing countries, safeguarding their national economic rights and interests, and promoting the struggle of all peoples against imperialism, and particularly against hegemonism.

At present the international situation is most favorable to the developing countries and the peoples of the world. More and more, the old order based on colonialism, imperialism, and hegemonism is being undermined and shaken to its foundations. International relations are changing drastically. The whole world is in turbulence and unrest. The situation is one of ‘great disorder under heaven’ as we Chinese put it. This ‘disorder’ is a manifestation of the sharpening of all the basic contradictions in the contemporary world. It is accelerating the disintegration and awakening and growth of the new emerging forces of the people.

In this situation of ‘great disorder under heaven,’ all the political forces in the world have undergone drastic division and realignment through prolonged trials of strength and struggle. A large number of Asian, African, and Latin American countries have achieved independence one after another and are playing an ever greater role in international affairs. As a result of the emergence of social-imperialism, the socialist camp which existed for a time after the Second World War is no longer in existence. Owing to the law of the uneven development of capitalism, the Western imperialist bloc, too, is disintegrating. Judging from the changes in international relations, the world today actually consists of three parts, or three worlds, that are both interconnected and in contradiction to one another. The United States and the Soviet Union make up the First World. The developing countries in Asia, Africa, Latin America, and other regions make up the Third World. The developed countries between the two make up the Second World.

The two superpowers, the United States and the Soviet Union, are vainly seeking world hegemony. Each in its own way attempts to bring the develop-
ing countries of Asia, Africa, and Latin America under its control and, at the same time, to bully the developed countries that are not their match in strength.

The two superpowers are the biggest international exploiters and oppressors of today. They are the source of a new world war. They both possess large numbers of nuclear weapons. They carry on an arms race, station massive forces abroad, and set up military bases everywhere, threatening the independence and security of all nations. They both keep subjecting other countries to their control, subversion, interference, or aggression. They both exploit other countries economically, plundering their wealth and grabbing their resources. In bullying others, the superpower which flaunts the label of socialism is especially vicious. It has dispatched its armed forces to occupy its ‘ally’ Czechoslovakia and instigated the war to dismember Pakistan. It does not honor its words and is perfidious; it is self-seeking and unscrupulous.

The case of the developed countries in between the superpowers and the developing countries is a complicated one. Some of them still retain colonialist relations of one form or another with Third World countries - and a country like Portugal even continues with its barbarous colonial rule. An end must be put to this state of affairs. At the same time all these developed countries are, in varying degrees, controlled, threatened, or bullied by one superpower or the other. Some of them have in fact been reduced by a superpower to the position of dependence under the signboard of its so-called ‘family.’ In varying degrees all these countries have the desire to shake off superpower enslavement or control and to safeguard their national independence and the integrity of their sovereignty.

The numerous developing countries have long suffered from colonialist and imperialist oppression and exploitation. They have won political independence; yet all of them still face the historic task of clearing out the remnants of colonialism, developing the national economy, and consolidating national independence. These countries cover vast territories, encompass a large population, and abound in natural resources. Having suffered the heaviest oppression, they have the strongest desire to oppose oppression and to seek liberation and development. In the struggle for national liberation and independence, they have demonstrated immense power and have continually won splendid victories. They constitute a revolutionary motive force propelling the wheel of world history and are the main force combating colonialism, imperialism, and, particularly, the superpowers.

Since the superpowers are contending for world hegemony, the contradic-
tion between them is irreconcilable. One either overpowers the other or is
overpowered. Their compromise and collusion can only be partial, temporary, and
relative, while their contention is all-embracing, permanent, and absolute. In the final
analysis, the so-called ‘balanced reduction of forces’ and ‘strategic arms limitation’
are nothing but empty talk, for in fact there is no ‘balance’ nor can there possibly be
‘limitation.’ They may reach certain agreements, but their agreements are only a
façade and a deception; at bottom they are aiming at greater and fiercer contention.
The contention between the superpowers extends over the entire globe. Strategically,
Europe is the focus. They are intensifying their rivalry in the Middle East, the
Mediterranean, the Persian Gulf, the Indian Ocean, and the Pacific. Every day they
talk about disarmament but are actually engaged in arms expansion. Every day they
talk about détente but are actually creating tension. Wherever they contend, turbulence
occurs. So long as imperialism and social-imperialism exist there will be no
tranquillity in the world, nor will there be ‘lasting peace.’ Either they will fight each
other or the people will rise in revolution. It is as Chairman Mao Tse-tung has said:
‘The danger of a new world war still exists, and the people of all countries must
prepare. But revolution is the main trend in the world today.’

In the fourth Middle East war, the people of the Arab countries and Palestine broke
through the control of the superpowers and the state of ‘no war, no peace’ and won
a tremendous victory over the Israeli aggressors. The African people's struggles
against imperialism, colonialism, and radical discrimination are developing in depth.
The Republic of Guinea-Bissau was born in glory amid the flames of armed struggle.
The armed struggles and mass movements carried out by the peoples of Mozambique,
Angola, Zimbabwe, Namibia, and Tanzania against Portuguese colonial rule and
white racism in South Africa and Southern Rhodesia are surging ahead vigorously.
The struggle to defend sea rights initiated by Latin America has grown into a
worldwide struggle against the maritime hegemony of the superpowers. The Tenth
Assembly of the Heads of State and Government of the Organization of African
Unity, the Fourth Summit Conference of the Nonaligned Countries, the Arab Summit
Conference, and the Islamic Summit Conference successively voiced strong
condemnation against imperialism, colonialism, neo-colonialism, hegemonism,
Zionism, and racism.

The hegemonism and power politics of the superpowers have also aroused strong
dissatisfaction among the developed countries of the Second World. The struggles
of these countries against superpower control, interference, intimidation, exploitation,
and shifting of economic crises are growing day
by day. Their struggles also have a significant impact on the development of the international situation.

Innumerable facts show that all views of overestimating the strength of the two hegemonic powers and underestimating the strength of the people are groundless. It is not the one or two superpowers that are really powerful; the really powerful are the third world and the people of all countries uniting together and daring to fight and daring to win. Since numerous Third World countries and peoples were able to achieve political independence through protracted struggle, certainly they will also be able, on this basis, to bring about through sustained struggle and thorough change in the international economic relations which are based on inequality, control, and exploitation and thus create essential conditions for the independent development of their national economy by strengthening their unity and allying themselves with other countries subjected to superpower bullying as well as with the people of the whole world, including the people of the United States and the Soviet Union.

The essence of the problems of raw materials and development is the struggle of the developing countries to defend their state sovereignty, develop their national economy, and combat imperialism, and particularly superpower, plunder and control.

As we all know, in the last few centuries colonialism and imperialism unscrupulously enslaved and plundered the people of Asia, Africa, and Latin America. Exploiting the cheap labor power of the local people and their rich natural resources and imposing a lopsided and single-product economy, they extorted superprofits by grabbing low-priced farm and mineral products, dumping their industrial goods, strangling national industries, and carrying on an exchange of unequal values. The richness of the developed countries and the poverty of the developing countries are the result of the colonialist and imperialist policy of plunder.

In many Asian, African, and Latin American countries that have won political independence, the economy lifelines are still controlled by colonialism and imperialism in varying degrees, and the old economic structure has not changed fundamentally. The imperialists, and particularly the superpowers, have adopted neocolonialist methods to continue and intensify their exploitation and plunder. They export capital to the developing countries and build there a ‘state within a state’ by means of such international monopoly organizations as transnational corporations to carry out economic plunder and political interference. Taking advantage of their monopoly position in international markets, they reap fabulous profits by raising the export prices of their own products and forcing down those of raw
materials from the developing countries. However, with the deepening of the political and economic crises of capitalism and the sharpening of their mutual competition, they are further intensifying their plunder of the developing countries by shifting the economic and monetary crises onto the latter.

It must be pointed out that the superpower that styles itself a socialist country is by no means less proficient at neocolonialist economic plunder. Under the name of so-called ‘economic cooperation’ and ‘international division of labor,’ it uses high-handed measures to extort superprofits in its ‘family.’ In profiting at other's expense, it has gone to lengths rarely seen even in the case of other imperialist countries. The ‘joint enterprises’ it runs in some countries under the signboard of ‘aid’ and ‘support’ are in essence copies of transnational corporations. Its usual practice is to tag a high price on outmoded equipment and substandard weapons and exchange them for strategic raw materials and farm produce of developing countries. Selling arms and ammunition in a big way, it has become an international merchant of death. It often takes advantage of other's difficulties to press for the repayment of debts. In the recent Middle East war, it bought Arab oil at a low price with the large amount of foreign exchange it had earned by peddling munitions, and then sold it at a high price, making staggering profits in the twinkle of an eye. Moreover, it preaches the theory of ‘limited sovereignty,’ alleging that the resources of developing countries are international property, and even asserts that ‘sovereignty over natural resources depends to a great extent upon capability of the industry of the developing countries to utilize these resources.’ These are out and out imperialist fallacies. They are even more undisguised than the so-called ‘interdependence’ advertized by the other superpower, which actually means retaining the exploitative relationship. A socialist country that is true to its name ought to follow the principle of internationalism, sincerely render support and assistance to oppressed countries and nations, and help them develop their national economy. But this superpower is doing exactly the opposite. This is additional proof that it is socialist in words and imperialist in deeds.

Plunder and exploitation by colonialism and imperialism, particularly by the superpowers, are making the poor countries poorer and the rich countries richer, further widening the gap between the two. Imperialism is the greatest obstacle to the liberation of the developing countries and to their progress. It is entirely right and proper for the developing countries to terminate imperialist economic monopoly and plunder, sweep away these obstacles, and
take all necessary measures to protect their economic resources and other rights and interests.

The doings of imperialism can in no way check the triumphant advance of the developing countries along the road of economic liberation. In the recent Middle East war, the Arab countries, united as one, used oil as a weapon with which they dealt a telling blow at Zionism and its supporters. They did well, and rightly too. This was a pioneering action taken by developing countries in their struggle against imperialism. It greatly heightened the fighting spirit of the people of the Third World and deflated the arrogance of imperialism. It broke through the international economic monopoly maintained by imperialism and fully demonstrated the might of a united struggle waged by developing countries. If imperialist monopolies can gang up to manipulate the markets at will, to the great detriment of the vital interests of the developing countries, why cannot developing countries unite to break imperialist monopoly and defend their own economic rights and interests? The oil question has broadened people's vision. What was done in the oil battle should, and can be done in the case of other raw materials.

It must be further pointed out that the significance of the developing countries' struggle to defend their natural resources is by no means confined to the economic field. In order to carry out arms expansion and war preparations and to contend for world hegemony, the superpowers are bound to plunder rapaciously the resources of the Third World. Control and protection of their own resources by the developing countries are essential not only for the consolidation of their political independence and the development of their national economy, but also for combating arms expansion and war preparations and stopping the superpowers from launching wars of aggression.

We maintain that the safeguarding of political independence is the first prerequisite for a Third World country to develop its economy. In achieving political independence, the people of a country have only taken the first step, and they must proceed to consolidate this independence, for there still exist remnant forces of colonialism at home and there is still the danger of subversion and aggression by imperialism and hegemonism. The consolidation of political independence is necessarily a process of repeated struggle. In the final analysis, political independence and economic independence are inseparable. Without political independence, it is impossible to achieve economic independence; without economic independence, a country's independence is incomplete and insecure.

The developing countries have great potentials for developing their
economies independently. As long as a country makes unremitting efforts in the light of its own specific features and conditions and advances along the road of independence and self-reliance, it is fully possible for it to gradually attain a high level of development never reached by previous generations in the modernization of its industry and agriculture. The ideas of pessimism and helplessness spread by imperialism in connection with the question of the development of developing countries are all unfounded and are disseminated with ulterior motives.

By self-reliance we mean that a country should mainly rely on the strength and wisdom of its own people, control its own economic lifelines, make full use of its own resources, strive hard to increase food production, and develop its national economy step by step and in a planned way. The policy of independence and self-reliance in no way means that it should be divorced from the actual conditions of a country; instead it requires that a distinction must be made between different circumstances and that each country should work out its own way of practicing self-reliance in the light of its specific conditions. At the present stage, a developing country that wants to develop its national economy must first of all keep its natural resources in its own hands and gradually shake off the control of foreign capital. In many developing countries, the production of raw materials accounts for a considerable proportion of the national economy. If they can take in their own hands the production, use, sale, storage, and transport of raw materials and sell them at reasonable prices on the basis of equitable trade relations in exchange for a greater amount of goods needed for the growth of their industrial and agricultural production, they will then be able to resolve step by step the difficulties they are facing and pave the way for an early emergence from poverty and backwardness.

Self-reliance in no way means self-seclusion and rejection of foreign aid. We have always considered it beneficial and necessary for the development of the national economy that countries carry on economic and technical exchanges on the basis of respect for state sovereignty, equality, and mutual benefit, and the exchange of needed goods to make up for each other's deficiencies.

Here we wish to emphasize the special importance of economic cooperation among the developing countries. The Third World countries shared a common lot in the past and now face the common tasks of opposing colonialism, neocolonialism, and great-power hegemonism, developing the national economy and building their respective countries. We have every reason to unite more closely, and no reason to become estranged from one another. The imperialists, and particularly the superpowers, are taking
advantage of temporary differences among us developing countries to sow dissension and disrupt unity so as to continue their manipulation, control, and plunder. We must maintain full vigilance. Differences among us developing countries can very well be resolved, and should be resolved, through consultations among the parties concerned. We are glad that on the question of oil the developing countries concerned are making active efforts and seeking appropriate ways to find a reasonable solution. We, the developing countries, should not only support one another politically but also help each other economically. Our cooperation is based on true equality and has broad prospects.

The Third World countries strongly demand that the present extremely unequal international economic relations be changed, and they have made many rational proposals of reform. The Chinese government and people warmly endorse and firmly support all just propositions made by Third World countries.

We hold that in both political and economic relations, countries should base themselves on the Five Principles of mutual respect for sovereignty and territorial integrity, mutual nonaggression, noninterference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence. We are opposed to the establishment of hegemony and spheres of influence by any country in any part of the world in violation of these principles.

We hold that the affairs of each country should be managed by its own people. The people of the developing countries have the right to choose and decide on their own social and economic systems. We support the permanent sovereignty of the developing countries over their own natural resources, as well as their exercise of it. We support the actions of the developing countries to bring all foreign capital, and particularly transnational corporations, under their control and management, up to and including nationalization. We support the position of the developing countries for the development of their national economy through ‘individual and collective self-reliance.’

We hold that all countries, big or small, rich or poor, should be equal, and that international economic affairs should be jointly managed by all the countries of the world instead of being monopolized by the one or two superpowers. We support the full right of the developing countries, which comprise the great majority of the world's population, to take part in all decision making on international trade, monetary, shipping, and other matters.

We hold that international trade should be based on the principles of equality, mutual benefit, and the exchange of needed goods. We support the
urgent demand of the developing countries to improve trading terms for their raw materials, primary products, and semimanufactured goods, to expand their markets, and to fix equitable and favorable prices. We support the developing countries in establishing various organizations of raw-material exporting countries for a united struggle against colonialism, imperialism, and hegemonism.

We hold that economic aid to the developing countries must strictly respect the sovereignty of the recipient countries and must not be accompanied by any political or military conditions and the extortion of any special privileges or excessive profits. Loans to the developing countries should be interest-free or low-interest and allow for delayed repayment of capital and interest, or even reduction and cancellation of debts in case of necessity. We are opposed to the exploitation of developing countries by usury or blackmail in the name of aid.

We hold that technology transferred to the developing countries must be practical, efficient, economical, and convenient for use. The experts and other personnel dispatched to the recipient countries have the obligation to pass on conscientiously technical know-how to the people there and to respect the laws and national customs of the countries concerned. They must not make special demands or ask for special amenities, let alone engage in illegal activities.

China is a socialist country, and a developing country as well; China belongs to the Third World. Consistently following Chairman Mao's teachings, the Chinese government and people firmly support all oppressed peoples and oppressed nations in their struggle to win or defend national independence, develop the national economy, and oppose colonialism, imperialism, and hegemonism. This is our bounden internationalist duty. China is not a superpower, nor will it ever seek to be one. What is a superpower? A superpower is an imperialist country which everywhere subjects other countries to its aggression, interference, control, subversion, or plunder and strives for world hegemony. If capitalism is restored in a big socialist country, it will inevitably become a superpower. The Great Proletarian Cultural Revolution which has been carried out in China in recent years, and the campaign of criticizing Lin Piao and Confucius now under way throughout China, are both aimed at preventing capitalist restoration and ensuring that socialist China will never change her color and will always stand by the oppressed peoples and oppressed nations. If one day China should change her color and turn into a superpower, if she too should play the tyrant in the world, then the people of the world should identify her...
as social imperialism, expose it, oppose it, and work together with the Chinese people to overthrow it.

History develops in struggle, and the world advances amidst turbulence. The imperialists, and the superpowers in particular, are beset with troubles and are on the decline. Countries want independence, nations want liberation, and the people want revolution: this is the irresistible trend of history. We are convinced that so long as the third world countries and people strengthen their unity, ally themselves with all forces that can be allied with and persist in a protracted struggle, they are sure to win continuous new victories.

9., 10., 11. Mikhail Sladkovsky, Andrei P. Markov, Anatoly M. Malukhin

Mikhail Sladkovsky was born November 21, 1906, in the Siberian village of Klukwennaja. He was graduated in economics from the State University for the Far East at Vladivostok in 1930. In 1966 he became director of the Institute for the Far Eastern Institute of the USSR Academy of Sciences. Professor Sladkovsky has written numerous books, among which are A History of Economic Relations between the USSR and China, The Foreign Policy of China, and China and Japan.

Andrei P. Markov was born in 1915 in Siberia. He was graduated from the Pedagogical Institute in Irkutsk and from the School of High Diplomacy in Moscow, and has been a journalist-observer of interna-

* The following three interviews are presented as one unit since they took place in a tripartite meeting in the Far Eastern Institute of the USSR Academy of Sciences.
tional problems. Professor Markov is a researcher at the Far Eastern Institute of the USSR Academy of Sciences. Among his publications are *Alliance Against Peace in Asia, Japan on the Road to Rearmament, Japanese Militarism* (co-author), and *From Antiimperialism to Antisocialism*.

Professor Anatoly M. Malukhin was born in Russia in 1911. In 1932 he was graduated from the Moscow Engineering Institute and from 1933 to 1936 he worked for the Soviet railway system. From 1937 through 1943 he was a journalist, after which he joined the School for Diplomats of the Ministry of Foreign Affairs in Moscow. He worked in the Foreign Office from 1947 to 1968. Over the years he has specialized in Chinese affairs and in 1969 was nominated China specialist of the Far Eastern Institute of the USSR Academy of Sciences.

A few years ago, during a visit to Moscow, I asked my friend Olga Chechotkina of Pravda, ‘What is Russia’s principal problem in Asia?’ To my surprise her answer was not China, as I had anticipated, but Japan.

PROFESSOR SLADKOVSKY

I think that the importance of any country is determined by a number of factors and not by a single one. If we were to speak from a point of view of the development of our economic relations, naturally Japan would occupy a very important position. Here we enjoy the prospect of an important expansion in our relations. But when we are talking from a political point of view, then naturally China occupies a certain position in our considerations, since it is no secret that the present Chinese leaders have created a fairly tense atmosphere along our frontiers over the past years, which was aggravated by the general situation. But actually it is not so much China itself that we are concerned with. We have historical and centuries-old relations and traditions with this nation. We have no real differences with China. The situation was aggravated mainly as a result of Mao Tse-tung coming to power and pursuing a clearly anti-Soviet policy. From the point of view of the present political situation, the problem of our relations with China has a certain, or perhaps even a fairly significant importance.
President Sukarno of Indonesia has often said to me, ‘We have strong ties with the Dutch but we despise Dutch imperialism.’ What you are saying reminds me of this: ‘We are against Maoism but we are for the Chinese people.’

Exactly. You have phrased your remark correctly in saying that we are having problems and that the entire dispute going on at present between us and the Chinese leaders is not related to China itself, but to the Mao Tse-tung government. I should mention in this connection that the policies pursued by Mao Tse-tung are not only anti-Russian but also anti-Chinese. They are contrary to the fundamental interests of China. And here you quite rightly conclude that we should make a distinction between relations we maintain with politicians and those maintained with the people they represent. We should make this distinction in connection with fundamental interests which every nation shares with any other nation.

Considerable confusion has arisen about the disappearance of Marshal Lin Piao, who was known to have adopted a friendlier attitude to ward the Soviet Union. He crashed in an airplane in Mongolia, according to the Peking authorities, but the Soviet authorities have said that they have not found his remains.

According to all the information that has come in, Lin Piao was indeed killed, but the exact circumstances are unknown to me as well as to my institute. It is, of course, clear that Lin Piao is no longer alive but this may be due to several reasons. Various explanations may be given for this. In my opinion - and this refers not only to Lin Piao but to the entire situation in China, where political instability continues to prevail - the main cause of the Lin Piao incident was that the general line of the Communist Party, which was laid down in China in the beginning of the fifties, was destroyed. It was an eighteen-year-old line which aimed at the building up of socialism in China. Mao Tse-tung has destroyed this general policy. He spoiled the relations with the Soviet Union and other countries. In view of this, our assistance and aid came to an end. The social construction of China was thus further delayed. However, Mao Tse-tung did not really determine a new line, nor did he offer an alternative to socialism. As a result not only the Lin Piao incident was created, but a whole range of events came into being which characterize the political instability of that country. We know nothing about a special program designed by Lin Piao, but I can well imagine that when people see that one program is canceled without being replaced by a new one, they will ask themselves the question: How are we to continue?
And then, we see that in 1972 a fairly abrupt change took place, originated by the Mao regime, in the field of foreign relations. On the one hand, the anti-Soviet attitude was strengthened and on the other hand friendship with large imperialist countries was cultivated.

It is known that Lin Piao was the chief of the Chinese army. It is also known that the army, in the course of many years, was familiarized with anti-imperialist slogans, in which the United States and imperialism, were the principle enemies. When it was then suddenly announced at the Ninth Party Congress and soon thereafter that the Soviet Union had now become enemy number one, I think that even among many people who are politically neutral great surprise arose. These sudden changes might also have caused certain feelings in army circles, the more since it was raised on the basis of such a different orientation. I think that we should not look upon the question of Lin Piao solely from the point of view of where his remains were found or trying to reconstruct the exact way in which he was killed, for this is a political matter. It is a question which is characteristic of the political instability which has arisen as a result of the destruction of the general line of the Communist Party and furthermore as a result of the absence of a clear political program for the future.

PROFESSOR MARKOV

I can give you my personal opinion. Maybe not even my colleagues will agree with this. My opinion on Lin Piao is as follows: Personally speaking, and therefore not representing the opinion of the institute in this case, I have never thought that Lin Piao could be a true supporter of Mao Tse-tung. Lin Piao was very ill and could play practically no active role in the life of the army any longer, and certainly not in that of the country. The general feeling in the army was still more or less known to him, but in relation to the political life of the country he was already absolutely isolated. In my opinion, Mao exploited Lin Piao's authority, because the marshal was someone with a great deal of importance. He was a hero dating back from the years of the civil war in the twenties and thirties and, finally, he was the main military figure during the decisive stage of the civil war during 1947, 1948, and 1949. He was commander of the principal armed forces, which were operating in Manchuria and we, in the Soviet Union, actually helped this army. Later it was this army that saw to it that the rest of Manchuria was dealt the final blow. Lin Piao became a national hero. His prestige was impressive, very great indeed. When Mao Tse-tung and his group destroyed the party, they had to call in the army, and for reinforcing their influence in
the army, they needed Lin Piao's authority. But I repeat: anyone who knew Lin Piao would never have seriously considered him as a successor to Mao Tse-tung. He was too sick a man for this.

Regarding your remark concerning the importance of Japan. I belong to a study group making a special study of Japan. We are of the opinion that that nation is playing a very distinct role, in many respects a leading role, in the future of Asia. Professor Sladkovsky has mentioned the importance of Japan, its economic and technical potential. I should mention the Japanese ability for hard work. Japan possesses an enormous knowledge of Asia and has direct contacts with all Asian countries. It has a very great need for such contacts and for good commercial, political, strategic, and other relations. All this turns Japan into one of the claimants for leading, possibly the leading position in Asia. How can Japan gain such a position? It is known that there are circles in Japan who are of the opinion that the way that formerly was followed by Japan, that is to say the use of military force and political influence, is the best way of maintaining its status in that part of the world and that this mode of conduct is the best answer to its national aspirations. These circles are of the opinion that an active policy of rebirth, of a return to the Asian political scene, will offer Japan the best opportunities of achieving these desired results, particularly by following the earlier-mentioned policy. But the political opportunities for Japan to display such initiatives in Asia in the future are extremely limited indeed. For the relations with the Asian countries that are Japan's neighbors must be undertaken cautiously. There are many reasons for this. Consequently, the possibilities for Japan to find a common 'language' with its Asiatic neighbors are extremely limited. Apparently, that is why the way which Japan has now chosen to follow - to develop economic contacts with these countries and to expand its own economic possibilities - will be precisely the way which will yield the most positive results for Japan. However, these results have become more doubtful recently since this policy - the so-called economic-diplomatic policy - is basically imperialistic. It is a policy aimed at the confirmation, by means of economic strength, of Japanese domination over the countries surrounding it. Therefore, a strong movement is making itself felt in Japan, or to put it more precisely, there is an interest developing to strengthen Japan's influence in Asia in other ways. For instance, one interest wishes to follow the proposal by the Soviet Union in creating a system of collective security. The purpose here is that normal mutual relations should be created between Japan and its neighbors, both in political and economic respects. For only such relations could form a sound basis to enable Japan to create the
situation that is needed to develop normal economic and political contacts with surrounding countries, and permit Japan to continue the road to prosperity in the future.

The Dutch were in Indonesia for centuries and when the liberation of Asia, which had been predicted by Lenin, took place in 1945 we in the Netherlands had no other answer to the Asian's call for liberty than to send in an imperialist army. We taught how to plant quinine, coffee, and tea, and how to tap rubber from trees, but there was never any real communication with Indonesians. Is not Russia facing the same problems in its communication with modern China? In the USA quite a fad has exploded among young people, even at secondary schools, to learn Mandarin Chinese. What is the situation like in the Soviet Union and is the same kind of interest in China shown by your young people?

PROFESSOR SLADKOVSKY

In our country the interest in China did not reveal itself suddenly. The relations with the various countries of Asia have shown different developments, but in regard to our interest in our principal neighbor, China, I must say that our knowledge has grown over the course of the centuries. It is therefore not a new phenomenon. It is well known that the basis for studying Chinese was once to be found among the Russian clergy. The first ecclesiastical mission to China left in the seventeenth century. In this country we once had experts on China among the clergy and, in later years, particularly after the October revolution, much sympathy for China was shown in this country. This was based mainly on political sympathy. We, the working people of Russia, showed great sympathy with China after we had taken over power in this country. Our leader, Vladimir Ilich [Lenin], taught us this. He often talked of our international obligation to assist to struggling nations, including China. I think our greatest interest, that is to say, a new move in the direction of strengthening our relations with China, took place during the twenties, when a widely organized democratic revolution started there, and when the Chinese revolutionary, Dr. Sun Yat-Sen, turned to us for help.

I myself, for instance, worked at the University of Shanghai during the Chinese revolution in 1926. We, the Russians, were moved by feelings of wishing to help the Chinese people on the basis of our political principles. Afterward certain rifts developed. This happened after the end of the year 1927. Our relations were spoiled as a result of Chiang Kai-shek adopting a more or less similar attitude to that being taken by Mao Tse-tung; an
anti-Soviet attitude. Chiang accused the Soviet Union of ‘red imperialism,’ while Mao Tse-tung is now calling us ‘socialist imperialists.’ When we look at the two statements, it appears that they coincide. I can give as an example a speech delivered by Chiang Kai-shek. As far as I remember, it was an address dating back to July, 1929, at one of the meetings organized by the leaders of the Kuomintang. If, today, you look at texts of the latest speeches delivered by Maoist leaders, you will see that the language is the same. Already in the late twenties our relations were spoiled, particularly as a result of this fierce anti-Soviet campaign. This was followed by the Japanese attack in 1931. China was subjected to great trials and the Soviet Union again started supporting the Chinese. This meant a revival in our relations. It also implied an expansion in our contacts in the field of science, and so forth. Our people traveled to China again. Our military specialists advised and helped and so did our scientists. But World War Two again caused an interruption in our relations with China. When we ourselves were engaged in a serious war, the full attention of our people and scientists was, of course, directed toward a solution of our most important problem: the struggle in Europe. Immediately after the war our interest in China and in the East increased again, especially when a new wave of liberation by the people occurred in places such as China, Japan, and Vietnam. Our interest grew and was shown particularly by our young people. And, in a matter of speaking, our people witnessed a rebirth of all those feelings which they had experienced at the beginning of our revolution: a wish to help another nation fighting for its national and social independence. We actively participated and lent our cooperation in the building of a socialist society in these Asian countries. Naturally, this required a very large extension of our relations as well as vast preparations. After the year 1958 when Mao Tse-tung - I don't have to tell you the whole history, which is sufficiently known - caused a rift in the relations with the Soviet Union. This was not the fault of the Soviet Union, but the result of the policies followed by Mao Tse-Tung. This line is best described as a chauvinistic policy followed by a big power aspiring to political hegemony. Our relations were significantly upset, and this was naturally reflected in the preparations made by our specialists. Nevertheless, because China is a neighbor and a reality for us, and because our politicians cannot ignore her, we continue to study China and to prepare our young people to study Chinese language and civilization. We base our decisions on our belief in the future. We know that there have been high and low tides in our relations with China before and that there always was anti-Sovietism whenever a counter revolution predominated. This was the case from 1927 to 1931. It was likewise the case during World War Two when the situation
on the fronts was bad. At that time the Kuomintang displayed an anti-Soviet attitude. We believe that in the future the Asian peoples, including the Chinese, will maintain friendly relations with us.

And yet, as regards communicating with Asians - I have just arrived from Japan and it is probably more true there than anywhere else in the world - one can learn a language, study a culture, in Moscow, Jakarta, or in Amsterdam, but it does not mean that one is laying a foundation for a genuine contact with people on the other side of the world, or sympathizing with their way of thinking, feeling, or behaving.

PROFESSOR MALUKHIN

I believe that the way of thinking of the Chinese, of the Chinese people, is in principle no different from the thinking of Europeans or of people anywhere else. There are certainly no great differences in China. We, the Soviet people, have convinced ourselves of this in the course of ten or even more years' work in China, particularly after the foundation of the People's Republic of China. A common language was found between us. And let me say something about the language barrier. There was no such barrier, no such stumbling block, between the Soviet people and their Chinese friends during the fifties. The Soviet people and their Chinese friends soon found a common language. A businesslike language, a political language.

PROFESSOR SLADKOVSKY

There are several schools of sinology, with various approaches. Among them are the traditionalists, found, I believe mostly in the United States. The essence of this school is that the Chinese way of thinking, their traditions and customs, place a limitation on the growth of knowledge in that nation. Some adherents of this school even say that the Chinese are not accessible to modern social-political doctrines. The traditionalists explain everything - even the present political instability - with the hypothesis that socialism has not found fertile soil in China and that the chaos created by Mao Tse-tung, the Great Leap Forward and the Cultural Revolution, were actually reactions against socialism. We do not share this opinion, nor do the enlightened Chinese. Sun Yat-Sen, one of the greatest politicians and philosophers of the present century, did not believe this, and he was a thinker who possessed a thorough knowledge of Chinese tradition. He was followed by the first Marxist teachers, Li Ta-chao, Chen Tu-hsin, and Ch'ü Ts'iu-po, who rejected the prejudice that implied the Chinese way of thinking is limited and not open to new ideas. They called this notion an insult to the
Chinese people. The experience of the Chinese revolution has shown that the Chinese are a very capable nation and that they are responsive to new ideas - and are also capable of realizing their progressive ideas. Apart from this, it would of course be wrong to deny that the traditions - the ancient traditions - including reactionary ones, have a certain influence on the Chinese consciousness. But revolutions, and particularly socialist revolutions, are chiefly aimed at destroying such traditions, after which socialism will lead the nation to the peak of its civilization. In this respect - and I repeat this - we do not share views which postulate tradition as the chief determining factor in the Chinese awareness. We believe that those traditions have already been outlived in many respects and that the Chinese are entering the modern era in which they are, among others, very much aware of the existence of modern doctrines, science, and civilization.

PROFESSOR MALUKHIN

The Western press is filled with discussions which claim that the Chinese are having difficulties in adopting Marxism. But this is incorrect. The twenties, and even the years that followed, showed that Chinese soil, if I may so put it, produced genuine Marxists - international Communists who made Marxism their own in an excellent way and who closely followed the teaching of Marx and Lenin. But Mao Tse-tung, his aides, and the men surrounding them collided with the Chinese Marxists, with the leaders of the revolutionary movement in China, with the Communists. Their names are well known: Li Ta-chao, Ch'ü Ts'iu-po, P'eng Pai, and others.

Amongst these reflections in the Western press there are detailed theories claiming that the Soviet Union is encircling China. The reporters interpret the visit paid by Leonid Brezhnev to India [in October, 1973] in this sense. How does the Soviet Union see its future relations with Asia; with India, China, and Japan?

PROFESSOR SLADKOVSKY

My point of view in regard to our relations with these countries and the situation in these countries is as follows. It is said in Europe and America, sometimes even with a certain fear, that China and India are very heavily populated countries - China with its 800 million and India with its 600 million inhabitants - and their views toward these heavily populated areas are formulated on this basis. This concentration of population does not make us afraid. I myself, as a scientist, and my colleagues as well, believe that
such fears are unfounded; that these countries have very large resources available and that they will, moreover, be able to ensure their future prosperity. An added reflection is that China and India have many domestic problems, a great many indeed. It seems to me that they are not interested in expansion abroad. As a case in point, China represents only about five percent of the world turnover of goods. What does this mean? It means that the major problems are domestic. China has no urge, no necessity, to occupy itself with foreign expansion. I believe that the situation in India is the same. India has many internal problems which remain unsolved after a prolonged period of colonial rule. For a long time to come the principal task of these countries will be the solution of their domestic problems. In view of the fact that we share the feelings of these oppressed peoples and that we are in favor of peaceful coexistence, we hope for peaceful and fruitful relations with India, China, and Japan. If you noted the speeches made by Comrade Brezhnev - he spoke in Tashkent and also on other occasions - there is one sentence in all these speeches that reflects our attitude, which is that everything and all depends on the Chinese leaders themselves. If they would only cease their extremism and end their speculations on war!

I will tell you how this situation can be explained. Why is China so politically unstable? Why is it talking of war? The reason is that Mao Tse-tung and his group wish their country to be a great power. They want hegemony over the rest of Asia, but their resources are weak, and this absence of a real economic basis for expansion is forcing them to follow an unconsidered, adventurous policy, a policy which counts on war and is based on the question of how countries can be brought into conflict with each other or how various provocations may be used so as to create tensions. But all this scheming is of a passing nature and does not correspond to the true interests of the Chinese people. That is why we believe that China will ultimately return to the road of peaceful coexistence, with our country; with others. But I must say that in assessing the situation for the next few years, I cannot see any clear perspectives; only a gloomy future for China. Mao Tse-tung is exploiting the fact that he enjoys great power. The population is huge. He is constantly changing the leadership. Persons who have had some experience are dismissed from their posts and he replaces them by completely immature people, by young people. He manipulates millions of the youth, and this enables him to create political instability, which will be fairly prolonged.

PROFESSOR MARKOV

I am convinced that prospects for the development of relations between
Japan and the USSR are excellent. The fact that Japan and the Soviet Union are close neighbors makes it imperative to maintain the very best relations and to try to further develop these contacts. After all, experience has convinced us that relations of another nature would only seriously harm our mutual interests.

The present process of exploitation of the vast areas of Siberia, as well as those eastern regions of the USSR in which enormous riches in oil, gas, coal, iron ore, copper, and other natural resources have remained largely underdeveloped, could offer Japan an opportunity to supply its industry with raw materials under favorable conditions. Furthermore, at a time when the energy crisis is sharpening and raw materials and fuels are becoming more expensive, this situation gains special significance for Japan. While at the same time, close cooperation with Japan in the exploration of resources in Siberia and parts of the eastern Soviet Union is also to us in the USSR of great importance, since it simplifies and speeds up a most complicated task.

Robert McNamara of the World Bank pointed out in 1972 that nations of the so-called Third World already owed no less than seventy billion dollars to the rich states, which meant that they were having to pay annual interest of seven billion. This amount has since risen to well over eighty billion. The gap between the rich and the poor countries is ever widening. What should the nations of the West or the socialist countries of Eastern Europe do to end this alarming and worsening situation?

PROFESSOR SLADKOFSKY

The debt which you mentioned and which McNamara was probably discussing concerns investments abroad. Foreign investments in the form of loans, in the form of direct investments in industry, all these investments together do, in fact, represent the amount which McNamara was discussing. A debt. The main problem is how to raise the economies of developing lands. Seventy billion is a large sum in itself, but when we talk of the whole world the amount is not particularly large. The economic advancement of these countries is connected with the raising of their economies. The chief damage that was caused to these former colonial countries by imperialism was that imperialism prevented their industrial development. The imperialist powers took only raw materials. The result was barter trade of an unequal nature. Roughly estimated, and on a world scale, the selling prices of these raw materials were unequal to the extent of four to five times when compared to the prices of the industrial equipment. Here we find the element of exploitation. This is why the well-being of the former colonial countries is
not served by extending loans or gifts from rich countries. The underdeveloped nations must be given the opportunity to build up their own national industries; not merely offered a chance to export their precious raw materials for industrial processing abroad. We in the USSR are already following this kind of policy. In return for our loans we do not expect raw materials, but industrial products. Naturally, each country exports raw materials - we ourselves are exporting many - but, in addition, they should be allowed to pay in industrial products.

PROFESSOR MARKOV

This debt of seventy or eighty billion dollars did not, of course, arise suddenly, but as a result of a process which took place over a long period of time and as a result of mutual political and economic relations which were not based on equality between the rich capitalist countries and the developing countries, the countries of the Third World. There is only one way out - the liquidation of the unequal principles which still form the basis of relations between the countries concerned, and by the creation of normal mutual relations which are at present championed by the Soviet Union and other socialist countries, as well as by the developing countries themselves. UNCTAD is also calling for the establishment of principles to improve and establish mutual relations between the underdeveloped and the developed countries on a basis of equality. The help from the developed countries should also aim at assisting the underdeveloped countries in order, as Professor Sladkovsky has said earlier, to create their own national economy, their own heavy industry; in other words, to lay the basis for their own national economy, which would enable them to become independent, both politically and economically. It is well known that the Soviet Union has recently introduced an initiative at the United Nations which aims at the reduction by developed, rich nations of their military budgets by ten percent, so this money, or part of the money which would be saved in this way, could be spent in rendering economic aid to underdeveloped countries. I think that such an initiative and such a policy would help these countries to emerge from the difficult position in which they find themselves.

Last month, while in New Delhi, I asked Madame Indira Gandhi how hopeful she was for the future - particularly that of the children of India - and her answer was a very positive one. What is the attitude of your institute and your research workers toward the population problem, the problem of food, and similar problems of Asia as far as the future is concerned?
In China, and India as well, about thirty percent of the available land is used at the moment, since only this percentage is suitable for agriculture. The remaining seventy percent could also possibly be used, but only if a great deal of capital were invested. A plan existed which would have taken twelve years to put through and which would have meant that this agricultural area would have been extended very considerably. At the moment 110 million hectares are cultivated in China. Harvesting in China takes place a few times, sometimes only once. On an average, they bring in one and a half harvests. This means that they are actually harvesting cereals. A not too big jump forward would mean that the area might be increased to 220 to 250 million hectares within five to ten years. The available land for agriculture could therefore be doubled. This means that the Chinese might some day have 375 million hectares from which harvests could be obtained. The present harvesting yield in China is an average of fourteen centners, a centner being 100 kilograms, per hectare. This is very low indeed. According to plans which the Chinese drew up at one time, they saw a possibility of increasing the yield in the near future to twenty centners per hectare. If you multiply this it would mean that this area would enable the Chinese to harvest 250 million hectares. If the cultivated area were thus increased and the average yield of the harvest increased, the Chinese would be able to ensure food supplies sufficient for about two thousand million people.

And how do you see this in Japan?

If you take Japan as an example, you will see that, as the people's prosperity increases, the proportion of food changes. We assume that the demand for cereals is becoming smaller. Japan once suffered from a shortage of rice, but today she has a surplus of about ten to eleven million tons of rice every year. Japan can meet her domestic demands although she has a very small amount of land available. The example of Japan will show you that even when there is considerable population growth, there is no real starvation problem. If we go back to India - and I am sorry to say that I cannot mention the exact figures as far as India is concerned - if the necessary work were done, mainly in connection with controlling the rivers there, the Indians could considerably expand their cultivated areas and increase their harvest yields during the next ten or fifteen years. There are
more problems in India concerning agriculture than, for instance, in China, but nevertheless, according to my estimates and those of colleagues, there is every possibility of solving the food problem in India. I am therefore of the opinion that the prospects in these countries are favorable.

*So you share the optimism shown by Indira Gandhi?*

**PROFESSOR SLADKOFSKY**

Yes, if this was Mrs. Gandhi's answer, I completely agree with her views and with her conviction that all these problems can be solved.

**Eindnoten:**

1. The author begs to disagree completely on this point, on reasons based on many years of experience in visiting Asia, notably Japan, or while living in Indonesia.

**12. Chakravarthi V. Narasimhan**

Chakravarthi V. Narasimhan was born on May 21, 1915, in Srirangam in the south of India. He studied at the University of Madras at Oxford, and in 1936 entered the Indian Civil Service in Madras. In 1950 he joined the government of India in New Delhi and held several important posts with the Ministry of Agriculture and the Ministry of Finance. In 1956 he was appointed executive secretary of ESCAFE (United Nations Economic Commission of Asia) in Bangkok. From 1959 to 1962 he served as undersecretary for special political affairs at United Nations headquarters in New York. In 1961, Dag Hammarskjöld appointed him *chef de cabinet*, a post he kept through the tenure of U Thant and until September 15, 1973. At present Mr. Narasimhan is
The United Nations comes closest to what we have in the way of a global organization. Yet, gloom and pessimism about the strength, the influence, and the prestige of the UN seem to be widespread.

To answer your question as to whence this gloom originates my impression is that it is largely due, first of all, to a general overexpectation. Secondly, it is largely due to a general misunderstanding about the nature of the organization. You have to remember that the United Nations is first and foremost an intergovernmental organization. While the Charter speaks in the name of ‘people’ rather than member states, the actions of governments here in New York in the various organs, such as the General Assembly and the Security Council, show that governments continue to pursue national interests through the UN machinery, especially when it comes to an issue in which major national interests of member states are at stake. Also, the United Nations can only be as effective as its member governments, especially those directly concerned, would wish it to be or are prepared to accept its position and authority.

But, in the long run, I am convinced that what is good for the United Nations is good for every member state. However, with the present Charter it is difficult for member states to see it in this light and that is part of our problem.

As far as overexpectation is concerned, this goes back to a very large extent to the moment when the United Nations was conceived at the end of World War Two. The organization was then seen as an answer to all the world's problems. It would be very nice indeed if it worked this way in practice. But as you well know we are faced with many difficulties. Foremost, there is the question of a lack of political will. Even to reach a degree of economic cooperation between member states, we require a political will on their part. In fact, some of the economic problems in the world are even more intractable than some of our political problems. This all results, of course, in general disappointment. One of my philosopher friends used to say that two of the greatest disappointments in life are to get what you want and not to get what you want. In fact, the origin of the term ‘nemesis’ is getting what you wanted in the first place and then finding that it is not what you wanted. In our case, people become disappointed because the United Nations has not lived up to their expectations. On the other hand, they will say, for example, in a situation such as we had in the West Asia
confrontation, going back to October 22, 1973, that the major powers might be able to agree on a course of action in stopping the fighting, but the only way to get the agreement implemented is still through the United Nations. It could not have been done by the two superpowers alone, even if they had been disposed to do so. It had to be arranged solely through the United Nations' good offices. As a matter of fact, the Secretary-General was reading to us the other day a cable he had received from a lady who told him, ‘Thank God for the United Nations.’

But coming now to the larger questions, including problems concerning our finite earth and its resources, the ‘limits to growth,’ pollution, the human environment, population, and so forth, we find an interaction of individual decisions, national decisions, and international action. If every person in the world decided to have ten children, you could imagine what would be the fate of the world. On the other hand, if everyone were to decide that it is best for his own personal reasons, and not for reasons of state or of humanity in general, that it would be unwise to have more than two children, let us say, then we would automatically reach a zero rate of population growth. Then it would be much easier over a period of time to plan the future.

I am convinced that questions concerning the environment, pollution, disease and epidemics, food and hunger, and so on transcend all national frontiers, especially in these days of technological revolution. With the present movement of individuals, like your being in Japan yesterday, today in New York, and tomorrow back in Amsterdam, it is quite obvious that the pace of the world has changed dramatically. People are moving constantly. What might be called the velocity of circulation has increased enormously, so that problems that perhaps could be isolated previously and be dealt with as individual problems, can no longer be dealt with solely on the national level; we have to have international action.

*Indira Gandhi stressed that population control should not be imposed from above, but should be achieved by free choice. But how can we achieve global awareness, and achieve it fast, that population control is a must?*

Population control will not be acceptable to all people. If it were acceptable, however, to a vast majority, the problem would be resolved to a large extent. It is quite impossible to try to find a universal solution. Nevertheless, the question of population has been given considerable attention during the seventeen years that I have been an international civil servant. What the United Nations actually has been able to do in the population field is fantastic.

*Willem Oltmans, On Growth Two*
When I joined the Economic Commission for Asia, more than seventeen years ago, I set up a special unit for the first time to deal especially with demographic problems. I was warned by one of my colleagues at that time, Gunnar Myrdal, who was then executive secretary of the Economic Commission for Europe, that this was dangerous ground for the United Nations to tread. But I replied that I did not mind it, since I knew my own area, Asia. Our major problem was population. I thought it imperative that we at least got to know what the dimensions of the problems were. The awareness of the population question, the complications surrounding economic growth, and so on, have been mainly tackled by the United Nations so far. The very first step, after all, in dealing with these questions is to be aware of them. This awareness was promoted through the work mainly done during the years of darkness, I might say, by the United Nations.

The United Nations lit one small candle, providing the light by which others could see what the future had in store for them. That was the very first step. Gradually, we all headed for change. For instance, the World Health Organization was a very conservative body some ten years ago. Dr. Bandau was in that respect a conservative, but he, too, later changed his attitude completely.

Many observers agree population is problem number one. What, in concrete terms, is the United Nations doing right now in this field?

We have a fund for population activities. It started with five million dollars five years ago. At the moment it has reached the level of fifty million, and it is likely to go up to one hundred million a year.

A World Population Conference is to be held in Bucharest. A world plan of action will be introduced and will certainly be adopted. This plan cannot be imposed on governments by the United Nations, any more than it can be imposed by national governments on the people, as Madame Gandhi has already pointed out to you. But, here again, there is a wide field open to research. Two kinds of research, that is. One is what we call operational research, meant to investigate why a certain program worked in some parts of the world but was not being adopted in other parts. We also study what should be done to make programs acceptable elsewhere. The second area of research is to examine where family planning has been acceptable and to study whether we would be able to give the people the tools, the necessary means to achieve the results they would like to achieve. Here, I feel, there is room for very considerable research and increased efforts. One of these days, I am sure, we will find the answers to these problems. Meanwhile, in those countries where population problems are the worst, we should con-
continue to use the known methods in trying to help reduce the population growth.

This is just one example of a problem, where, exactly as you said earlier, the United Nations will be responsible for bringing about the necessary awareness of these questions and for promoting the recognition of the need to take action at three levels: internationally, nationally, and at the individual levels. Only then will we be able in the long run to put forward plans of action on a global level and at the same time at the national and individual levels, as in India.

We have had various United Nations missions visit India to study our family planning programs, for instance. Discussions were held to examine how they could be improved. Of course, we at the United Nations are ready to give assistance in this sector to any country that might seek it. On the other hand, it is not the purpose of the United Nations to impose family planning on any government or to tell them what they should do, since this would be a counterproductive method.

*Would you be prepared to assume, in switching to the problem of ‘limits of growth’ and limited resources, that in view of a future decrease in the availability of raw materials, scarcity even, aggression between the rich nations, those which use the precious resources of this planet at the heaviest rate, and the developing nations might arise? A small replica of what might be in store was the oil crisis late in 1973.*

I hope, on the contrary, that the developing nations will meet the great opportunity they have now to share their resources with the advanced nations that are dependent on these resources. You see this very clearly in the conflict over oil. I do not think there will be conflicts of the sort your question implies.

*But it would seem only natural that the poor and underdeveloped southern half of this globe will eventually be fed up with a situation in which the United States, representing six percent of the world's masses, uses up forty percent or more of the natural resources, which supposedly belong to all of us. The same goes, by the way, for Europe.*

I think that type of conflict was perhaps possible in the nineteenth century and the first half of the twentieth century. But I do not think it possible in the last third of the twentieth century; for either the United States or France to go and seize an oil well in order to protect their financial interests.
Only because if any of the Western nations made a wrong move, the Soviet Union would step in.

And apart from that, it would not be practical policy. Take this morning's newspaper or the radio telling us that we will all run out of gas. What does that mean? That we are to use less. It also means that developing nations can and will ask more for what they have to offer. During the last quarter of the century we may at last see a leveling of standards between the rich and the poor countries, a reduction of the inequality which has already plagued mankind for so long.

And in the process, I am sure that the advanced nations will have to make considerable changes in their patterns of consumption. In the long run they will probably come to the conclusion that this is a good thing as well. There is no great advantage in throwing away an automobile after using it only one year. There is no great advantage in not having repair facilities and being confronted with a situation, as they have in this country [the United States] where it is cheaper to throw away a refrigerator than to try to repair it. This is a highly wasteful way of proceeding and before long people will discover it. We will also see changes in patterns of consumption because resources will become increasingly scarce. We will find, I think, that this is the very leverage that the developing countries hold in order to reduce the inequalities and gaps, not only in growth rates, but in living standards. I hope that the living standards of the rich and the poor countries will meet over a period of time at a certain acceptable level, which is what you might call the good life in the best sense of the word. Does the good life have to mean the possession of numerous television sets, telephones, and countless other luxury products? The good life consists of having enough to be able to live in comfort and decency with a limited amount of leisure, so that there is time available to pursue esthetic and intellectual interests.

This is the great lesson, I feel, that we in Asia have to offer to the advanced nations of the West. I remember years ago an American friend of mine came to India. He was a very compassionate man. One day he told me, ‘You know, I have seen so many people walking on bare feet in the sun. My heart goes out to them.’ I replied, ‘My friend, you have missed a great opportunity. You have come to India and you have been looking at the people's feet to see if they are shod instead of looking at their faces to see if they are happy. You will find that these people, poor as they are, walking barefoot as they do - and it should not happen; I am not justifying it - but in spite of it all, they are happy people. This is what is missing in your part of
the world. That is the great difference between you and us. We are content with a lower standard of living. Samuel Johnson once said, ‘A big cup and a small cup can be equally full.’ The question is not whether the big cup holds more or the small cup holds less, it is which is fuller. A full small cup can represent a greater level of contentment and satisfaction than a half-empty cup which is three times, four times, six times the size of the smaller cup. If man could only adjust his patterns of thinking to his patterns of consumption, then I think he will find that everything falls into place. I regard this scarcity of resources as one of the great opportunities for economic and social statesmanship, for we could use it to change people's attitudes toward these very important questions linked to human survival.

13. Shinkichi Eto

Professor Shinkichi Eto was born November 16, 1923, in Mukden, China. He was graduated in law at the University of Tokyo in 1948. From 1949 to 1953 he worked at the Institute of Oriental Culture at the same university. In 1953 he was associate professor of political science at the Tokyo Institute of Technology. In 1967 Mr. Eto became professor of international relations at the University of Tokyo, where he is at present chairman of the International Relations Department. Among his recent publications in English are Moderation and Radicalism in the Chinese Revolution, Essays of Interpretation, and ‘Postwar Japanese and Chinese Relations,’ in Survey magazine.

In discussing Japan's position in today's world, forecasts were made that Japan will become even richer than the United States. Surely, Japan is becoming economically powerful. But you also need peace to survive, in order to guarantee a constant flow of raw materials and so forth. How do
you expect Japan to handle this power in view of the rich natural resources of
Southeast Asia and, for instance, a developing China?

The basic attitude of Japan since World War Two has been one of noninvolvement. In terms of international relations, it will remain so. Perhaps, under the overwhelming influence and impact of the United States, Japan at first leaned towards Nationalist China on Taiwan. After all, we were strongly tied to the security pact with Washington. With the acceptance of these two major involvements, Japan remained noncommittal vis-à-vis various international conflicts.

I feel that this basic attitude or political approach will continue in the 1970's and 1980's. The reasons for this are as follows: Japan will remain a house divided against itself in terms of domestic politics. The government cannot exert strong leadership in terms of external policies. When the government intends to make move A, the opposition certainly will take a stand anti-A. The balance then will end up being a decision with only a little bit of A. That's all. For instance, some Japanese politicians wanted to increase defense expenditures radically and rather swiftly. But the opposition has constantly opposed such measures. Consequently, national defense, or the increased rate of the defense budget, has been only very gradual. It remains at less than one percent of the gross national product.

Again, this linkage of domestic and external policies makes it impossible for Japan to pursue rather active and positive policies in the realm of international relations. That's the first reason. Secondly, sooner or later the LDP will lose its majority in the Lower House, the House of Representatives.

*By LDP, you mean the Liberal Democratic Party.*

Yes. A true coalition government in Japan will become possible either in the latter half of the 1970's or in the early 1980's. Then, surely, the existing policies of Japan will be changed. For instance: the opposition has been opposing all along the American-Japanese Security Treaty. They have also been opposing the present system of national defense. And, thirdly, they have been opposing the economic expansion of Japan in the less-developed countries.

*Why is that?*

I don't know. Ask them! Also, the opposition has been very suspicious of Japanese economic collaboration with less-developed countries. They have interpreted our present economic cooperation with developing lands -

Willem Oltmans, *On Growth Two*
- like Brazil?
  Yes - as economic imperialism. As soon as they are successful in forming a coalition government, there will be major changes in present policies.
  And the third question I should raise in this respect is that nobody in Japan, including myself, knows what direction Japan should go in the international community. Some extremists are inclined to advocate their own ideological philosophy, but the big majority in Japan, the moderate and practical people, have no idea in what direction Japan should develop. For instance, our economic activities in the outside world have created ambivalent sentiments on the part of the recipient nations.

Like Thailand.
  Exactly. Perhaps they owe a lot to Japanese economic activities in their country, following Japanese management and Japanese technology. Japanese money has been invested there and it has made an increase in the Thai per capita national income possible, but at the same time -

- they owe you too much and you possess too much.
  Precisely. They often blame us for our overbearing presence there. Certainly the nationalist sentiments of the Thais have been injured by Japanese economic activities and increasing alienation has been the result. The majority of the Japanese people have no inkling of what the adequate speed of our economic expansion or collaboration in other nations should be. That is our problem. These are the three main reasons that Japan will not play an active role in the international community, at least for another few years.

But at the same time, with the support of Washington, it is suggested that Japan be given a permanent seat in the Security Council of the United Nations.
  Well, economically speaking, you could safely say Japan's role in the international community has been increasing. For instance, we have plenty of surplus in foreign currencies. Therefore, we are forced to spend a lot of money outside Japan. Likewise, we are forced to initiate capital investments abroad. But, on the other hand, I am not so optimistic about the increase of Japan's role, politically speaking, in the international community, for the basic reasons I have just explained, while in addition, the United Nations seems a very complicated organization. Perhaps the United States made a public statement to that effect, but I do not know whether Washington will make a concrete proposal.
They did already.

No, no. They declared the intention, but they offered no concrete proposal as to how Japan should be invited as a permanent member of the Security Council. Surely, India or Brazil would not be too happy about it, while Italy, I understand, has been eyeing a seat as a permanent member for some time.

Italy would be ridiculous. Brazil and India, yes. France and Great Britain should be thrown out as permanent members, forthwith. They represent the world power structure of 1945!

All right, that is your point of view. But objectively speaking, the possibility of Japan becoming a permanent member of the UN Security Council is not bright.

The young people of Japan, when I walk on the campus of Kyoto University, look like students in California - blue jeans, sweaters, driving about in their cars. But, to them, how much is surface glamor and how much is inner conviction that what comes from the United States is good for Japan? What lives in the hearts of your students?

That is a very good question. Since students belong to the intellectual set, let me talk about Japanese intellectuals. They have two major characteristics. First, Japanese intellectuals make a very clear distinction between what they really feel inside and what they talk about or write about in public. What they really feel includes some admiration - perhaps that is even too strong a word - for the white man, including Western Europeans and Americans.

Perhaps more hidden admiration, not manifested openly.

Best described by the psychological term ‘inferiority complex.’ Therefore, Japanese intellectuals are always eager to have contacts with, for instance, French culture, or, let us say, the American way of life. At the same time, the basic inferiority complex of Japanese intellectuals has made them hide their true sentiments vis-à-vis the non-Oriental. Because in their hearts they do criticize the United States and even like to think about the decline and downfall of European civilization. They like to discover defects and shortcomings in American society or Western society in general. It really is extremely difficult to discover the real and true feelings of Japanese intellectuals toward Western society. Let me give an example.

A very radical left-wing professor, who had been vocal about American imperialism and had written numerous articles against American activities in
Asia, and who supported student riots enthusiastically, was contacted by the United States Information Service in Tokyo, which asked him to come to America and study there during a three-month tour. He immediately accepted and he did go to the United States. He had a pleasant journey, accompanied by a special interpreter provided by the State Department. Nevertheless, he continued to criticize America.

After his return to Japan?
Surely. Nonetheless I am convinced this professor is fond of Americans and of the American way of life.

But isn't it possible to be fond of America and Americans and be deadly opposed to the damned system, Nixon, and the corrupt politics of that kind of world?
That is true. Well, Nixon is, let us say, a different matter. This is just a scandal and people do not like scandals. But, I would say, some of these critics of the American way of life and the system of private initiative - the American capitalistic system - seem to be fond of the luxuries offered by the system. At the same time, if they are invited by Peking, they are equally delighted to visit the People's Republic of China, but the moment they leave the country and reach Hong Kong, most of them comment that they are extremely happy to be out of that state again. They compare China to a military ballet, and complain about its totalitarian system, but when they return to Tokyo, they will address people in public and unanimously praise China for its various accomplishments. They never criticize the Peking rulers in public. Now, this is a very good contrast by which to portray Japanese intellectuals, no matter how left-wing or how right-wing they may feel politically.

Therefore, we as international relation experts nowadays pay very much attention to the basic psychological structures of various nations. Without trying to analyze various nations psychologically, and study their behavior patterns, we cannot analyze international relations anymore. And I think this is particularly true in trying to analyze the Japanese people.

In my few trips to Japan, I have learned that much about the 'computer' in Japanese heads.
The Japanese psychology should be compared to an onion: you peel one layer and another appears. Then, peel that one and another presents itself. And each layer differs from the other.
What matters is the linkage between these layers.
   Right.

But what is the attitude of your students toward Japan, not only insofar as it expands into an economic giant, but also their feelings about Japan's international obligations on the political front?

They are very puzzled. When they are very young, like the freshmen in the universities, they are very romantic and idealistic. I would say more than ninety percent of the freshmen in our universities are against the rearmament of Japan. They are against power politics and against corruption in Japanese business and political circles. They are extremely enthusiastic about pursuing righteousness and justice in the community. But once they become juniors, they begin to realize how complicated the reality of the human society in this world is. Some will become conservative and more realistic. I would say that when they become seniors, ninety percent of the students are busy trying to find a good job, visiting various private firms, taking government exams, and most of them have become very realistic. Therefore, the problem is this: how to reconcile their idealism and romanticism with reality. After all, corruption certainly exists even in the government. Look at government officials - all of them are wealthy! Even Prime Minister Tanaka has not hesitated to give money to journalists. Or let me rephrase this statement: even Tanaka has not hesitated to spend plenty of money for his own political purposes. Also, externally, Japan is confronted continuously with various kinds of power politics. Sometimes Japan even has to cope with blackmail directed at us by weak powers.

Like the Arabs?

Indeed. The Arab countries are protesting our friendly relations with Israel. Also, when President Sukarno of Indonesia provoked a clash about Irian-Barat [West New Guinea] with the Dutch, his government vehemently protested the visit of a Dutch aircraft carrier to Yokohama harbor. Finally, the Japanese government decided to yield to Sukarno. That is an example of blackmail by weak powers.

Perhaps. But Sukarno apparently was not that weak, if he succeeded in forcing his will upon Japan. Which nation was weak, Japan or Indonesia, or Sukarno for that matter?

Indonesia is weak compared to Japan.

Willem Oltmans, On Growth Two
Japan was the weakest because it gave in!

Exactly. And that is what puzzles young Japanese students the most. They begin to realize how dirty world-politics are and they sometimes wish they could get rid of that world.

By the time they themselves become politicians they will behave as their fathers do now and be corrupt, no?

Precisely. That is the change that takes place in human beings constantly. We have always seen it in Japan.

What I find hard to understand is that so many democratic governments maintain close and profitable relations with some of the most corrupt and inhuman regimes in Southeast Asia today, like Thailand, before the recent coup, or Sukarno's Indonesia, where first hundreds of thousands of peasants were slaughtered by the fascists and then many thousands more were imprisoned indefinitely in concentration camps. No wonder Japan, too, runs into difficulties with the masses of Southeast Asia.

I do not wish to make any comment as to whether or not the governments of Thailand and Indonesia are corrupt. What kind of policy and what kind of government they have is solely their business.

What I wish to stress here is the fact that the Japanese people had a period of 220 years of complete seclusion, from 1639 to 1854, in addition to the geographical isolation inherent in an island country. The Japanese people are not used to dealing with the various cultural conflicts that occur when different cultures meet. They have a tendency to be oblivious to the culture, thinking, and behavior patterns of other peoples, with the exception of West Europeans and the Chinese. Since the Japanese people were located along the periphery of the sphere of influence of the Chinese Han civilization until the 1850's, and have been located in the periphery of Western civilization's sphere since, they have developed an inferiority-complex psychology toward these two cultures.

What disturbs me is a prevailing tendency among the Japanese to be polite, generous, and flexible when dealing with the Chinese and Westerners, but self-centered, arrogant, and inflexible toward other peoples. Unless these characteristics can be corrected, I do not think we can solve the anti-Japanese problem in Asia.

How do you see the development of communication between Japanese

Willem Oltmans, *On Growth Two*
youths - you help to raise them - and the hundreds of millions of Chinese youngsters being brainwashed by methods inspired by Mao?

That is a very good question, too. Let me take the example of Kissinger's feelings about Japanese and Chinese leaders. Prior to his going to Peking I am sure Kissinger harbored a very suspicious state of mind vis-à-vis the Peking rulers, including Chou En-lai. But as soon as he began to examine various international problems with Chou En-lai, both of them discovered that they held the same point of view, namely, power politics. Both of them discovered that they had the same strong intentions of pursuing their own national interests. No matter how convincingly Chou spoke about the moral problems of our age, it was all just window dressing. Another peel, and under the layer there was that old power-politics-oriented state-of-mind.

Kissinger became fascinated by Chou En-lai, whereas, in talking with Prime Minister Tanaka and Foreign Minister Masayoshi Ohira, he couldn't find a common ground. Therefore, I am sure the United States and the People's Republic of China will be able to continue a substantial dialogue. On the other hand I am very worried indeed about a future dialogue between the Japanese and Chinese peoples. On the surface, both nations are talking of moral problems, of Asian liberation movements -

- of airline communications.

Yes - and of economic collaboration. But I do not think there is a common ground for further detailed discussions. Misunderstandings will take place sooner or later, and misunderstandings between the two nations could easily create political conflicts. I am very much worried about this. I am still young, so I do not like to see these kinds of future conflicts between China and Japan develop. In our department, we will continue to be detached and try to analyze Chinese-Japanese relations so as to find a way to avoid future conflicts. After all, that is my obligation as a scholar.

Are you training students to know the maximum about the new China? Do they learn to speak Chinese?

Yes, certainly. I have been doing my best to recruit first-rate university students for the field of Asian studies, and, in particular, China studies.
14. Chie Nakane

Professor Chie Nakane - sometimes called the Japanese Margaret Mead - was born November 30, 1926, in Tokyo, and spent her youth in Peking. She studied the history of Tibet and China at the Department of Oriental History of the University of Tokyo and later went to the London School of Economics to study social anthropology. She took additional courses in Tibetology at the Instituto Italiano per il Medio ed Estremo Oriente in Rome. In 1952 she joined the Institute of Oriental Culture of the University of Tokyo, where she holds a chair in social anthropology. Professor Nakane did field work in India on the social organization of the hill tribes in Assam and the Himalayas, and among the Nayars in Kerala. She studied the Hindu family and village community systems in Gujarat and Bengal, and worked on other projects in Japan, Malaysia, and Singapore. She has lectured at the Universities of London and Chicago. This interview took place at the Center for Advanced Study in Behavioral Sciences at Stanford, California, where Professor Nakane was doing research during 1973 and 1974. Among her publications in English are *Kinship and Economic Organisation in Rural Japan* and *Japanese Society*.

You have called Japan ‘a homogeneous society.’ How would you define or illustrate a homogeneous society in comparison, for instance, to American or Indian society?

It is based on the simple fact that the same ethnic people have occupied the Japanese Islands from prehistoric times, maintaining a cultural and social unity, without having been disturbed by the migration of other peoples. There were some immigrants from the continent between the third and
seventh centuries who had significant effects on the formation of the state at that time. However, their number was so small as to be quickly assimilated into the native population. Since then, the Japanese population has constantly cultivated a common culture, the trend of which was particularly enhanced under the centralized feudal system of the Tokugawa regime and later by the modern centralized bureaucracy. Japan is a rarity among nations today in that its population consists of such a homogeneous people.

That makes Japanese society a hard nut to crack. Yet, pop art and pop music, and jeans, seem rather popular these days in Japan. How much is surface and to what extent, do you think, will Japan retain its homogeneous character?

Acceptance of other cultures is a distinctive habit of the Japanese people. However, they have accepted them as fragments or parts, not as an operational system, so that they hardly affected the core of our cultural and social tradition. Most of them are found in overt aspects, such as materials and techniques. It is indeed surprising how the Japanese have been able to maintain their native way of thinking and their social system in spite of having come under heavy influence from Chinese and, later, Western cultures. Perhaps because we live deep in our own culture it does not matter how much superficial change may occur owing to external influences.

Would you say that group commitment wins out in Japan over individualism?

I think we have to explore this question carefully. I always harbor some suspicions about the expression ‘individualism versus group consciousness.’ Of course, we do not share the history of Europe. Perhaps, if our people were placed in social circumstances comparable to those of Europeans or Americans, it could very well be that individualism would undergo a more intense development. Undoubtedly, especially following the medieval age, the emphasis in Europe lay on the development of individualism. In Japan history did not take such a turn.

Throughout its history Japanese values have been directed toward maintaining harmonious relationships with others, particularly in primary relationships. Appreciation of and adjustment to others are highly regarded, while aggressiveness and expression of self are regarded as awkward bad manners. According to my analysis, the emphasis has been directed in the West toward element (individual) and in Japan toward relation (between individuals). These are different approaches, but are comparable alternatives. In practice, each has its own merits and demerits; and an
extreme in either direction would bring on a bad result. In comparison with the West, the behavior pattern of the Japanese naturally manifests a strong group orientation.

Yet, I did hear from some of your students that some Japanese employers nowadays look upon young arrivals from the schools and universities as almost un-Japanese. That, I think, is a matter of degree. As far as my own observation goes, as I teach at the University of Tokyo, the basic attitude of students has not changed, particularly regarding group activities, which are observed more than ever. What makes them different from the older generations is found in their manner of personal interactions. They are much franker in expressing their opinions, they do not employ overritualistic behavior patterns, their manners are greatly simplified in comparison with the older generations. They are less dependent on a senior person than were their predecessors. This must be attributed to the fact that in general their life has become easier owing to economic affluence and easy job opportunities. Also, in earlier days, students did not have so many choices.

They had no pocket money: they could not afford tape recorders or cars. They didn't have so many alternatives, that makes the difference. To me, the behavior of our younger generation is the quite natural outcome of the contemporary Japanese economic situation of affluence.

Your students also now have the possibility to travel the world by the hundreds and thousands. They read English now, and are exposed to a great influx of ideas from Western society. Would this not sooner or later affect an entire new generation of Japanese?

I still doubt how deep it will all go. Such activities may widen their scope and may contribute to a gradual change. But it should be noted that they may also become critical of the Western system and culture. Admiration of snobbism vis-à-vis the West has considerably decreased among young Japanese in comparison with the older generation. The important point is that so long as they are employed by Japanese organizations, whether they like it or not they will certainly be molded into the Japanese pattern. It would be a different story if young Japanese were to stay in the United States or anywhere outside Japan, employed by foreign firms. But these young people would have difficulty in returning to Japan and reintegrating into society.

I read an article by Robert Trumbull in the New York Times of October 4,
1973, about a group of sansei third-generation Japanese who had lived abroad - finding Japan extremely frustrating to live in. One sansei girl from California put it this way: ‘My frustration trying to make friends really hit me hard. There is just no feedback.’ The Japanese won’t accept them back?

It will be difficult to integrate them again. They will be cut off from society. The Japanese sociological operation is such that they recognize individuals as one of ‘us’ because they are in the same organization, not because they are Japanese.

But, then, they will become displaced persons?

More correctly, they are regarded as having become members of another organization. It happens in the same way in Japan even for those who left their natal village community: they must join a new organization in place of the old one. Once one leaves the natal community, it is difficult for him to maintain the membership. Therefore, if young Japanese take these facts into account - they know it instinctively - they will not stay outside the country for too long.

In your book A Japanese Society, you compare the family situation in Japan with that in India. Now, I am more familiar with conditions in Indonesia. There you could very well find a situation in which an elder brother works in an office to support a younger brother in his studies at a university. Would this kind of blood-relation solidarity be possible in Japan?

No. The Japanese are quite different in that respect. Even in a traditional rural society one could not depend on or look to kinship ties. You probably know that in general Americans have much stronger family ties than we have in Japan. In our society, kinship has never been so functional. Brothers, uncles, cousins, and so on do not have the same function as in Indonesia, for example; they have to develop other alternatives.

Through friends, then?

That's the way. Friendships among colleagues and senior and junior persons in the workplace are very important.

Within the framework of the company one works for. I understand big Japanese firms seek to work almost within the framework of the one big family idea.

That's right. That is in part why the place of work becomes so important to the Japanese.
In September, 1973, Prime Minister Tanaka organized a review of attitudes of youth in Japan versus youth in the world. Twenty thousand children throughout the world were supplied with a questionnaire. To everyone's surprise, the result was that Japanese youth were by far the most cynical, dissatisfied, and realistic. For instance, when the questionnaire asked, Is man's essential nature good or evil? only twenty percent on an average in other nations replied that it was evil. But in Japan thirty-three percent of the youngsters were of that opinion. Are Japanese youths realistic or pessimistic about the nature of man?

I don't know. The problem is that we Japanese are not accustomed to thinking in that way. If you ask such a question in an unprepared way, suddenly you will get -

-the wrong answer.

Indeed. We are not familiar with being put such a question point-blank. We do not immediately express ourselves on such deep questions.

How are we to understand the Japanese? I once read that even if a foreigner were to learn all the words in the Japanese dictionary, he would still have to learn to think as a Japanese.

That applies to any language. Maybe to Japanese more than any other language, since our culture has been over the ages such an isolated one.

But why did you say a moment ago that Japanese do not think so deeply?

I think this is just our habit. Japanese are sensitive but not philosophical. As a matter of fact, most of the well-known countries in history have produced their famous philosophers, but Japan never produced a single outstanding philosopher. The Japanese character does not function that way. On the other hand, the Japanese are most keen to develop esthetic sides of their soul. The most outstanding contributions by Japanese are found in the field of art, particularly in paintings. To the Japanese, beauty is more important than logic or thinking in a philosophic way about man's life. The stress always seems to lie more on how to make life beautiful.

I once read a headline above an interview you gave to Newsweek that read: 'Japanese Have No Principles.' From your writing I drew a different inference: that the Japanese do not rely much on dogma, on principle, but more on a situation.

That is right.
The headline was misleading then.

We have principles we can work with. But we do not have a concrete ideology to profess to other peoples or to establish a specific goal in the long run. Rather, we seek the best way to adjust to the situation encountered. In the face of ever-changing world situations, such an open system is one of the devices for a country like Japan.

Would you sympathize with foreigners coming to Japan to communicate with some significance to Japanese people? I always found it difficult until I published a book in Japan and was asked to address the students at Hitotsubashi University. In other words, I was for the first time properly introduced into Japanese society. Then, not only was it easy to communicate with the students during the lecture, but a deputation later visited the Imperial Hotel for a discussion deep into the night.

Japanese are unaccustomed to dealing not only with people from different cultures but also even with their own people from a different organization. In order to get to them, you have to find someone who accepts you personally or who was very much impressed by you. Then you could be introduced to his friends. A formal or businesslike approach will not result in any further relationship. The Japanese individual does not approach others unless there is an established personal relationship.

However, this may apply to many societies, if not so much to a mobile society like the United States. Perhaps it exists to a greater degree in Japan. Moreover, Japanese do not have the habit of enjoying a talk with a stranger in a casual encounter, even if the latter has been properly introduced. Perhaps this makes foreigners in Japan feel terribly lonely and frustrated.

What would be your advice to us foreigners coming to Japan? You know both worlds. How can we communicate more effectively with the Japanese?

That is a very difficult question. I think foreigners should begin by studying the social structure, the system of our society. Foreigners too often judge us on the basis of their own set of values. This applies equally to the Japanese who come to the United States. We have to know each other's systems first before we make any judgment or statement. But, of course, what is more difficult than understanding a way of thinking, of functioning? Foreigners become particularly frustrated in our society, since we do not vocally explain what we really think. At the same time, a Japanese automatically expects that foreigners should understand him. And when this fails he concludes that foreigners will never be able to understand the Japanese and
Japanese culture. Thus, Japanese tend to neglect the effort to help other people understand. Moreover, verbal communication has not been much developed among them as compared to other peoples. This is one of the crucial drawbacks for the Japanese in international communication: among themselves they use so much nonverbal communication!

Looks, eye movements, voice tones. And then there is the language barrier on top of it all.

Besides, we have much more complicated rituals in personal interactions than do, for example, Americans. From our point of view foreigners are normally out of tune, so we do not take them seriously. Moreover, it is rather difficult for us to explain all these minor but essential rituals. English people also have elaborate rituals, but they are well known, and at the same time the English are much more skillful in expressing themselves to others than Japanese are. In this respect, the Japanese must be one of the most difficult peoples with which to communicate effectively.

The political scientist Professor Shinkichi Eto told me that Prime Minister Tanaka communicated rather well with Kissinger when he went abroad, but in his meeting with Brezhnev, they were hitting the table in anger. I know peace and communication in external relations are most vital for the future of the Japanese islands - I am speaking of survival - so someone should write a book on how to deal effectively with the Japanese and vice versa.

That indeed is the difficulty. But I think we are slowly improving. A general increasing awareness of a different outside world is taking hold in Japan.

I recall that former Prime Minister Eisaku Sato once replied to the question of Japanese textiles imports into the United States, ‘I will do my best.’ The translation came through to Nixon as ‘I will do it.’ Then, when nothing happened, Nixon got mad and Japanese-American relations underwent a turn for the worse. So we still are faced, on top of everything else, with the limits of language.

Right. It is indeed awful.


15. Luis Echeverría Alvarez

Dr. Luis Echeverría Alvarez, the President of Mexico, was born January 17, 1922, in Mexico City. He studied law at the University of Mexico. In 1946 he began a political career as assistant secretary to the chairman of the PRI (Partido Revolucionario Institucional). In 1951 he joined the Ministry of National Education. In 1952 he accepted the general direction of the administration of the Mexican Navy. In 1960 he was nominated deputy secretary-general of the Ministry of the Interior. In 1964 he was appointed Minister of the Interior. He is generally held responsible for orders to the police to shoot, on October 2, 1968, at demonstrating students, which led to numerous deaths. On December 1, 1970, he became President and Head of State of Mexico. In 1974 President Alvarez attended a Club of Rome meeting in Salzburg, Austria, and invited this organization to hold its 1975 annual meeting in Mexico.

During the UNCTAD HI Conference in Santiago you put forward a proposal to arrive at a planetary formulation of human behavior, mainly in the sector of financial and economic transactions.

I proposed this in the name of Mexico at the Third General Meeting of the UNCTAD in 1971 for the drafting and approval of what we have so far called the Charter of the Economic Rights and Duties of the States. Most countries that were represented at this meeting expressed their sympathy with this proposal. A resolution was passed to set up a committee of thirty-one countries for the purpose of preparing a draft for such a code. Later on, the United Nations decided to extend the number of members of this committee to forty. Already, in Geneva, a number of meetings were held to work out a
draft charter which will be submitted and discussed at the session of the General Assembly of the United Nations in the autumn of 1974. Its general outline, the basic idea, is the creation of a balance between the rich and poor countries; between the underdeveloped countries and the countries that have already begun to develop and the industrial countries which have achieved a very extensive sphere of influence as a result of their scientific and technological development which has gone on for many centuries. It is not only the principle of international, social justice that is involved here. Peace is also involved, for the essential principle is that when the differences in the world are becoming greater and more alarming, as we find today, it is here that the cause for the continuation of this unjust situation has to be looked for in the first place.

In the second place, the frightening differences between the rich and the poor are causing upsets in the balance, which may also extend - as happened during the oil crisis and may happen again whenever there are growing shortages of other essential raw materials - to countries with high standards of living. Suddenly the balance is undermined by inflation, which is no longer restricted to one country, and which, moreover, extends to the poor and raw-materials-producing countries.

The world will urgently have to find solutions for these surprising developments. According to the UN Secretary-General, Kurt Waldheim, the United Nations will certainly give their approval to the draft which is being drawn up in Geneva and which will have to be completed by the end of 1974. Exactly how this charter will appear in detail depends on the countries which are now drafting it, but the essential part of it I have just told you.

What is also involved is the defense of the political sovereignty of the developing countries. As a result of the interest which is shown by foreign investors in raw materials, and owing to the social and political structure of the developing countries, the foreign investments are inseparably bound up with ideologies and commercial propaganda which affect the political life, causing a danger to the political autonomy of the developing countries in question. The original draft of this new charter therefore speaks of the correct use of natural resources, balance of trade, and free transfer of technological knowledge. That is to say, it presupposes the understanding that the world should get away from those ideas that have so far caused great differences and eternal discussions in many fields of international life and have even been the cause of wars. After all, war has never been a solution for these kinds of problems.

More than in 1971, when this charter was put forward by myself in
Santiago, we have observed an increasing number of highly dangerous and alarming phenomena during the last two and a half years, even in countries which were not apparently facing any serious problems up to a few months ago and which have been prosperous up to now. It is essential that the Mexican proposal should not be looked upon as being exclusively a Mexican draft, but as a proposal which is backed by many countries, as a proposal in the United Nations, in fact, should be. Thus, our efforts to get it approved will not be looked upon as representing the interest of one particular country or one particular government, but as a heritage and an aim and a necessity for the international community as a whole. This idea did not, after all, happen to be born in Mexico. Economically and militarily speaking, we are not a powerful country. On the other hand we are not underdeveloped either. Mexico belongs to the countries showing a moderate development and influence. But we have witnessed a profound revolution, and what our government has again proved with its proposal is certainly of a daring nature. For these reasons we have put the proposal before the entire international community.

The visits I am paying to various countries take place in a period in which Mexico is far more active in the field of international politics than it used to be. In these visits we have urged, among other things, that this proposal be seriously studied and be approved as quickly as possible. This is briefly the idea behind a charter, a code of behavior in international trading, as we have proposed it.

*What reactions to your proposal have come from the various power blocs such as North America, Europe, the socialist countries, and Japan?*

This question is an extremely interesting one. There is, for instance, uncertainty concerning the reactions of the rich countries, the great industrial powers such as the United States, some European countries, and Japan with regard to the proposal which is now being discussed in the United Nations. Initially, it was thought that the charter was meant as a political and juridical instrument to defend those countries wishing to start their own development or which have already made a start and now wish to accelerate the rate of their development. As might have been foreseen, the large countries, which did not experience the same serious problems as the poor countries, reacted either by being indifferent or by openly opposing the plan. However, the situation is far more complicated and, consequently, also more promising. In the beginning there was indeed a lack of interest or else the proposal was looked upon as romantic or utopian. But even a few months after the proposal was formulated, we have seen an important change. The
powerful countries have begun to see that tense situations caused by opposing interests in the small or poor countries gave rise to conflicts within their own countries. In addition, they prefer a well-organized world on account of the growing and increasingly perceptible mutual dependence of each country's economy and on account of their need for raw materials whose production can be stimulated. The result is that there is now, indeed, a very healthy and well-motivated desire for technological and economic collaboration. I do not think that there is anyone today, not even in the Third World, who holds to the point of view that an independent and spontaneous development is a serious possibility. All the countries, even the smallest and the most remote ones, know that they need the help of scientific research, of many modern instruments, and that they cannot change a primitive agrarian economy into an industrialized state overnight. Without overestimating the importance to mankind of the machines and equipment of our modern civilization, it is well understood today that the development of a country's own agriculture, cattle breeding, various other primary activities, and its industry, absolutely depends on being equipped with the most modern machines. Some agricultural countries thought, against all the rules of logic, that they could develop independently along the same process which the industrialized countries went through in the past. But they soon realized their mistake.

Even the most elementary agricultural production cannot be increased without disposing of the many instruments which have been developed by our modern civilization. It is therefore necessary to remove the prejudices now prevailing in the very rich and in the very backward countries, for everyone is bound to benefit from mutual collaboration. In the near future there will still be many problems to be solved: the problem of respecting the sovereignty of the weak countries, which will, in a world where there is more coordination, tend to show more mutual dependence, respecting each country's own cultural evolution and its own specific character, a development which allows for everyone's own education and artistic manifestations. For although these cultures are in the center of the world and receptive to all kinds of outside influences, yet it is desirable for all peoples, whether they are already one nation or becoming one nation, to go through a reasonably independent development on the basis of their own personality.

And then, finally, there is the problem of the supranational planning of many activities. In this field there have indeed been only a few incidental attempts undertaken. But the most foresighted thinkers have clearly seen the necessity of a collective and thorough discussion concerning the many aspects of universal planning, comprising countries of various ideologies,
both capitalist and socialist. Many bilateral attempts have been made to arrive at a solution of certain problems, particularly of late. But we are living in a world with many universal relations, and undoubtedly the research workers, economists, sociologists, and politicians will have to start thinking more and more in terms of supranational dimensions about coordinated exchange and trading.

Aurelio Peccei, chairman of the Club of Rome, is partly motivated by the wish to contribute toward making a better world for his grandchildren. You attended the meeting of the Club of Rome in Salzburg in October, 1973, and in the local press I noticed a picture of your family with your children and grandchildren. I would therefore draw a parallel between Peccei and your own wish to do something for the young, as President of your country. How do you see their future?

Undoubtedly, the future generation will have to cope with far more serious problems than we are facing today. I do not believe there has been a thorough investigation as to the cause of the disquiet among adolescents and young people all over the world. Sometimes, explanations are given for this which are, in my opinion, of a superficial nature when there is talk, as has happened particularly during the last few months - but this has been almost forgotten now - of the need to change the social structure of many countries, to stimulate and accelerate the development process, and to give young people more chances, also at the executive level. The human psyche is undeniably far more complicated. Many young people and adolescents at the moment see a world full of uncertainties. This is undoubtedly the reason for their searching for a change in the social structures. They are often the cause of irregularities and rebellions which are sometimes considered unfounded but which, in my opinion, result from the fact that the future world lacks a reasonable amount of certainty, something which has to be visible to every man and which is necessary in order to lead a life with a logical meaning. Aurelio Peccei is right in this as he is in many other matters. He did admirable work in preparing the meeting in Salzburg. This work was crowned by him during the last few days when he used all his talents and skill to get the Club of Rome to change its course and aims rather quickly. When one has children and grandchildren this is the way one thinks. To continue with your question, we need to observe the social phenomena that are shared by many countries. We have done so for years. It is therefore easy to imagine that, in a world which goes through a never-ending process of development, many young people feel that their natural uncertainties, of which they have been aware from their early adolescence, are increasing in society. These
uncertainties manifest themselves in the economy, in family life, in life in the big cities, and in the many constantly changing and ominous international problems. As a result, the young, particularly the most intelligent among them, get the feeling that no secure and certain future awaits them. I believe that this is a good explanation for the many worries which they experience. It also explains their search for and use of the wrong means and the unrealistic solutions they find, some of which border on self-annihilation. I therefore believe that everyone has to do his own duty. When even many adults are disappointed about life in our modern age, a combined effort will have to be made. This is the important development that is required. Not only government leaders but the entire world has to help in working on the problems in order to arrive at a combined attempt at building up a better life in our present society, which is going through a serious period of crisis.

16. Amilcar O. Herrera

Professor Amilcar O. Herrera was born October 23, 1920, in Buenos Aires. He received a PhD from the University of Buenos Aires and a Master of Science from the Colorado School of Mines. He lectured on economic geology at the universities of Buenos Aires and Santiago, Chile. In 1969 he joined the Fundación Bariloche, of which he is chairman of the Department of Natural Resources. Since 1972, he has also been director of a Latin American model prepared at the same institute. Professor Herrera attends Club of Rome meetings and is a consultant to the United Nations. He is the author of various books on the subjects of natural resources and minerals.

*What is your impression of the 1973 symposium held by the Club of Rome here in Tokyo? Do you feel the club has now reached the point where it will*
turn in a more positive direction instead of shouting from the rooftops that the world will fall apart?

As I am not a member of the Club of Rome, I can give you only my general impression on that matter. I think that the Club of Rome has taken a distinctly different direction since the last meeting, which took place near Paris, in January, 1973. The most important change is that the club now seems to recognize that the main obstacles to the development of mankind are not physical but sociopolitical. Naturally, there is still a great deal of discussion about limits to growth, zero growth, the population explosion, and so on, but there is a clear shift of interest in the direction just referred to.

The club started its activities a few years ago, trying to avoid political opinions and implications, in order to concentrate on what they thought were the ‘global’ problems facing mankind, but they soon discovered that this was impossible. There are no important world problems without sociopolitical implications. Trying to analyze them from a nonpolitical point of view means the same as taking a very definite political position. I think that the Club of Rome is now facing that reality, and going in the right direction.

I have the impression from the deliberation during the symposium that Afro-Asian and Latin American delegates actually forced this different turn in the direction of the Club of Rome.

I agree that they had a great influence on that change. When the Club of Rome first met, they were thinking in terms of a world that in the face of the global problems posed by the physical environment could be considered as a unit. Now they have to admit that humanity is really divided into two parts, a rich and a poor world, and that the situation has to be taken into account in any strategy for survival. The final aim might be a unified humanity, but to achieve that result the entire structure of world policies has to be radically modified. Anyway, this is far in the future, and at present we better accept the truth. It is the only way that offers some hope of eventually reaching a unified and better world.

So the Club of Rome can be expected to steer away from technology, computers, figures, and drafts and pay even more attention than hitherto to the human side of the story.

There is no contradiction between computers and a humanistic approach. Mathematical models are very useful, specifically in the study of the material side of the world, and can be of great help in the developing countries in finding the most rational way of improving their living conditions. But the
fact remains, a computer is only an instrument and the results it gives are not better
than the assumptions and data used as inputs.

*The computer is only one appendix of the brain.*

Yes, it is just an extension of the capacity of the brain. A mathematical model is
only the formalization of a mental model, that helps to establish the exact quantitative
relationships between the variables used, and to eliminate internal redundancies and
inconsistencies.

*A great number of the problems presently being discussed are centered around the
social and physical effects of consumption. What do you think about this problem?*

The problems of consumption have a completely different significance for the two
sectors into which the world is presently divided. Most inhabitants of the
underdeveloped countries cannot satisfy their basic material needs of life. For them,
to increase consumption of such things as food, housing, health care, and education
is a prerequisite for their incorporation as full active members of their societies.
Freedom, democracy, and social participation have no meaning for people living in
utter misery, who have to devote all their energy to the daily struggle for bare survival.

In the developed countries, the problem is entirely different. A great part of the
population has a consumption of material goods far beyond that required to adequately
satisfy the basic needs of life, and practically all the population lives well above the
subsistence level. The production of material goods increases constantly owing to
two main reasons: first, the market economy is based on profit; and second, and
socially most important, economic growth is a substitute for social equality. The only
justification for social inequality - which now is equivalent to economic inequality
- in a rich society is the illusion that economic growth will eventually bring everyone
to the same level of consumption now enjoyed by the privileged sectors of society.
The truth is that the problem of the advanced countries is a problem of redistribution
of wealth, not increasing production.

Where the MIT team advocates zero growth, they include two fallacies in their
reasoning. The first is to consider average world consumption, thus hiding the fact
that a third of the earth's population consumes about eightyfive percent of the total
resources; and the second is to assume, implicitly, that zero growth is possible in a
society in which material goods are unequally distributed.
What do you think about the possibility of achieving, at some time in the future, the stabilization of economic growth?

I think that given an egalitarian humanity in the sense previously defined, the stabilization of economic growth is not an economic or natural resources problem, but a cultural one based on values. Today, consumption is a social value, a value per se, at least in the capitalist countries. Unless this value is replaced by others, to stop or reasonably stabilize economic growth will be impossible. The crucial decision will be whether to go on continuously increasing production or to increase free time, thus allowing people to enjoy the cultural values that at present are the privilege of a minority of mankind. I cannot predict which will be the choice, but I believe that an egalitarian humanity, from the point of view of material goods, will be in a better position to take really rational decisions.

Your team at the Bariloche Foundation is working on what aspects of the problématique?

The aim of our model is to present an alternative, from the point of view of the Third World, to the models being constructed in the advanced countries. Our model is based on a few basic premises.

The MIT model predicts a catastrophe which would take place in the next seventy or eighty years. The form of the catastrophe will be widespread hunger, high mortality rates - in general, miserable conditions of living. We believe that there is no need to wait seventy or eighty years to see the catastrophe: that is the present situation for a great part of humanity. We are concerned with this presently existing catastrophe, not with the one predicted for the future.

Another point is that we believe the effect of mankind on its physical environment depends to a great extent on its form of social organization. This position is completely different from that implicitly assumed in most of the solutions proposed in the advanced countries. In general, it is assumed that in the interrelationship between man and his ecosystem, the social organization is relatively negligible, or, in other words, can be considered as a constant. Even when some of the physical components - the total amount of natural resources, for instance - are also considered constant, the whole system becomes univocally determined. So the fatalist sometimes appears, advocating that only by reducing population and stopping economic growth can the disaster be prevented, even at the cost of perpetuating the misery of the Third World.
If we accept the fact that the social organization and the system of values can be modified, and this, in turn, will change the impact of mankind on its environment, new degrees of freedom in the system appear. In other words, the future of mankind is again an open option, depending on the will of humanity and not on unchangeable physical constraints.

To understand the reason why many of the solutions advocated by the advanced countries are of the fatalistic type, we can review some historical precedents. When Malthus developed his theory of scarcity at the beginning of the nineteenth century, his scientific base was very weak to say the least. However, if his thesis was so widely accepted, it was because it responded to the interests of the dominant classes of the time. The policy of salaries, implicit in Malthus' thesis, was the basis of the accumulation of capital during the Industrial Revolution.

In another context, the situation is similar now. The solutions advocated by the advanced countries tend to perpetuate the international and social organization upon which their privileged position is based. For that reason, only the victims of the system, the underdeveloped countries, have the motivation to explore all the degrees of freedom of the system-mankind-environment to look for new, more realistic, and rational solutions.

We believe, also, that the disadvantaged countries cannot develop by following the same path adopted in the past by the now rich countries. In the first place, it is impossible: historical and social conditions are now entirely different from those prevailing during the Industrial Revolution. Secondly, even if it were possible, it is undesirable, as it would mean repeating the same mistakes that have led the advanced countries to their present situation of social deterioration and growing alienation.

Finally, we believe that for their development the backward countries will have to rely on their own resources, natural as well as human. We have to accept the fact, and the sooner we do the better, that we cannot expect any substantial help from the advanced countries.

*Those are your general premises. On what social and economic assumptions is your mathematical model built?*

The central assumptions of our model are the following: We aim at an egalitarian society. By that we understand a society in which every human being - by the mere fact of his or her existence - has an absolute right to adequate satisfaction of the basic material and cultural needs, namely: food, shelter, health care, and education. That means these needs must be fulfilled as a social service, independently of salary. Beyond these basic needs appear
the cultural options, which the model does not try to determine, as they depend on the cultural values of each society. The only assumption at that level is equal opportunity for access, which means full participation in all social decisions. Another essential point is that production will be determined by social needs and not by profit.

With these premises, we constructed our model around a function of basic needs that determines what is the total amount of material goods a human being requires to be wholly incorporated as an active member of his society without wasting resources. The adequate level of satisfaction of these needs - food, housing, health care, and education - has been determined through a careful study of each. We also built a model of population - based on the analysis of historical evidence - which generates the population as a function of the socioeconomic variables used in the model. The population model confirms the historical evidence that the only way to effectively control the rate of demographic growth is by improving the socioeconomic conditions of the people.

The main purpose of the model is to show that, given the appropriate social decisions, an adequate level of living for every human being can be reached in a reasonable time.

Finally, I want to stress again that we include in our model only basic needs, in other words, needs that are invariable for any possible society, because we think that all other higher-order needs are culturally determined and vary with every human group. We believe that the cultural diversity of mankind should be maintained and enriched.

*Not like China?*  
Why not?

*Well, all of China seems to be wearing the same dull gray suit - all are waving the same red book; I mean, regardless of their fantastic achievements since the rise of Mao Tse-tung. You seem to aim at a greater variety instead of strict programming of all people.*

Yes, but don't forget that China is in a period of transition to a new society. I don't think we can judge the rich and complex Chinese process by such external features as a red book or a gray suit. I believe that all processes of deep social change are very complicated, nonlinear, and full of contradictions, and the Chinese experience is not an exception to this rule. I do not know which form the process of change will take in the rest of the Third World, because history never repeats itself; but it will surely be a very
complex one, given the economic, social, and cultural diversity of that sector of the world. From a long-term point of view, we are already immersed in that process of change, although we still cannot foresee how it will evolve and what type of society will emerge from it.

One of my African interviewees expressed the view that it was too early to speak to his students about problems of ‘limits to growth’ or hand over the MIT study to the popular press of Africa. How is this situation in Latin America? I am particularly interested in whether young people take part in your team.

The MIT model has been much discussed in Latin America, and the predominant opinion is that it represents the point of view of the advanced countries.

As to the second part of your question, the members of our team are not too young, usually between their late twenties and early forties. We believe that the ideas incorporated in our model reflect the ideals of a great part of the youth of Latin America. In these ideals are embodied the best possibilities for change in Latin America.

Then perhaps we do not find too many flower children among Latin American youths, turning to Eastern religions, Zen, and Buddhism, as we find nowadays in the advanced nations?

No, our youth in general consider these contemplative attitudes as a form of escapism. They realize that sixty percent of our population is below the minimum level of decent living, and that such a situation can only be changed through a hard political struggle.

My personal opinion is that most hippy movements are more an expression of a decadent society than the vanguards of a new world. They represent a personal ‘solution’ which has nothing to do with the construction of a new society.
17. Léopold Sédar Senghor

Léopold Sédar Senghor was born October 9, 1906. He attended the Lycée in Dakar and the University of Paris. After several teaching assignments in France, he became a member of the Constituent Assemblies in that country (1945-1946). From 1946 thru 1958 he served as deputy from Senegal to the National Assembly in Paris. In 1960 he became the first President of the free African Republic of Senegal and leader of the Partie Union Progressiste (PFA). In 1965 he was awarded the Dag Hammerskjöld prize. President Senghor attends the meetings of the Club of Rome. He is a well-known poet and has published among other literary works, *Chants d'ombres*, *Hosties Noires*, and *Nocturnes*.

*What was your reaction when you became familiar with the report published by the Club of Rome, which has, in the meantime, become common knowledge?*

My first reaction was a positive one, because I had already recognized the dangers of growth, for growth had been cultivated at the expense of development. I once said to President John F. Kennedy, I think it was during my visit to America in 1961, ‘You are beaten in advance by the Soviets because you waste too much. For instance, you are constructing buildings with a height of hundreds of meters and all this while your reserves of raw material are limited.’ Because I know what wastages are rampant in the Western world, I have welcomed the publication of this report. I first read the English and then the French edition. I made extensive notes.

*Do you believe that this shocking report had better not yet be published on the African continent because, as a Nigerian scholar advised, Africa was not yet ripe for it?*

I believe indeed that the report by the Club of Rome is first of all meant for the Western world. It is a problem of the West. As I stressed before, there is too much waste. Western man stuffs himself with fat and sugar: we have not yet reached that stage. We need a minimum of growth. In spite of this, I
believe that the report is also useful to Africa because it draws our attention to the
fact that quantitative economic growth is by no means sufficient and that our attention
also has to be drawn to qualitative growth. The report of the Club of Rome contains
much food for thought, also for us. I have therefore given it a great deal of attention.
It is a fact that we followed a policy as indicated by the club long before the
publication of the report. For instance, in 1972 we spent thirty-three percent of our
budget on matters such as education and general training, in other words, on cultural
activities, whereas our defense only got twelve percent of the budget.

*In the Ivory Coast 500 million dollars will be spent by 1980 to educate young people
through television. There appears to be a shortage of teaching staff in Africa. What
is the situation in Senegal?*

In a way it can be compared to the situation in other African countries. However,
we do not use television education, as is done in Nigeria and the Ivory Coast. We
use practical secondary education. The reason is that our problem is the following:
We are unable to let all children that have left primary school have secondary
education. But, in spite of this, we believe that they should be able to go to school
up to their sixteenth year. This means that after primary school we have to arrange
for their further schooling, lasting four years. We have found the solution in practical
secondary education. Our aim is to complete the general knowledge of these children
and at the same time teach them a job so that they can become good fishermen,
shepherds, farmers, bricklayers, or furniture makers. This confronts us with the task
of building up an entirely new educational system, and in view of this we have applied
to the World Bank to obtain credits which are necessary for applying this new
pedagogical method. Practical secondary education will be extended to eighty percent
of the children who have left primary school. The remaining twenty percent will be
able to follow higher education. As you see, we are therefore working in a different
way than is being done in the Ivory Coast. However, if television teaching should
lead to positive results - and we are closely following the developments in the Ivory
Coast as far as this is concerned - we will undoubtedly change over to their method.

*This morning, when you brought up the subject of your son, who is studying music
in the United States, your remarks led me to ask you how you see the future of African
young people.*

I am an optimist by nature. I believe that all problems can be solved as long as
they are systematically and rationally studied and no short-term

Willem Oltmans, *On Growth Two*
solution is considered. We aim at raising the per capita income of the population, which was 200 dollars the year we achieved independence, and which has now risen to 243 dollars, to 600 dollars by the year 2000 so as to enable us to enter the industrial period by that time. We also wish to make economic and cultural developments run parallel to each other but in a different way than is customary in Europe. In Europe the aim is to enable all children to receive compulsory free and public education, whereas we can only allow forty percent of our children to go to school in spite of our spending thirty-three percent of our national budget on education and general training. In our practical secondary education we are trying to find a means of enabling our children, both those who have been in school and those who have been unable to do so, to achieve further training. In addition, we created in all provincial districts - each district numbers about twenty thousand inhabitants - a district expansion center where the younger generation can learn modern agricultural methods, taught in the African languages: for instance, the use of selective seeding, harvesting corn, working with plows drawn by oxen, operating sowing machines, and so on. As you will understand, we have every hope of being able to keep our promises, all the more so as we have found bituminous oil below the bottom of the sea along our coast, even though its exploitation is not yet profitable. In addition, we have iron and we will construct flood-control dams. We therefore think that we can reasonably expect to be able to enter the industrial era by the year 2000. Then we will be ready to compete with values from other parts of the world, particularly from Europe, but always without denying our own African background.

You are thinking of the spiritual and psychological values of your people?

Exactly - of the psychological values of our people. Since achieving our independence we have already created a Senegalese art of painting, sculpture, and textile designs. In the middle of June, 1974, an exhibition of Senegalese art will be held in Paris which will afterward go to Stockholm, Helsinki, Vienna -

Also to the Netherlands?

I will be able to talk about this when I pay an official visit to your country during the latter part of 1974.

The Emperor of Ethiopia, Haile Selassie, once said to the Organization for African Unity that he was of the opinion the African continent would be free from all foreign domination by 1983. Do you believe that as well?
Apart from South Africa and Rhodesia, yes. I believe that the Portuguese colonies will be free and independent before the year 1983. ¹ As far as Rhodesia and South Africa are concerned, this process will probably last a little longer, but, in spite of this, I believe that by the year 2000 all Africa will be free. However, I do not mean to say that we intend to drive out the whites. The Africans have solemnly declared in the Lusaka Declaration that the white people and particularly the white people of South Africa and Rhodesia have the same rights as the black people, the Arabs, and the Berbers. However, we are not prepared to grant additional rights to the white population. In other words, when I said that South Africa and Rhodesia will be liberated by the year 2000, I mean that around this time they will have become democratic states.

*The Club of Rome has received an invitation from the President of Mexico to hold its 1975 meeting in Mexico. Will you go there?*

When I have time, I shall be glad to go to Mexico. All the more so since I am following developments in Mexico with a great deal of interest. For Mexico is an integrated society, a society which consists of eighty-five percent of various races of peoples. This is in my opinion an extremely interesting situation because, after all, all great cultures are mixed cultures.

**Eindnoten:**

¹ This interview took place a few months prior to the coup d'état in Lisbon in 1974.

**18. Alex N. Leontiev**

Alex N. Leontiev was born in 1903 in Moscow. He was graduated from the University of Moscow and the same year entered the Institute for Psychology. Since 1926 he has taught at the College for Communist
Education of the USSR Academy of Sciences. His first book appeared in 1931: *The Development of the Memory*. From 1932 to 1935, Professor Leontiev was head of the psychoneurological department of the Academy of the Ukraine, and at the same time lectured at the Pedagogical Institute of Kharkov. In 1945 he was nominated chairman of the Faculty of Psychology of Moscow University. He is vice president of the International Association for Scientific Psychology. In 1963 he was awarded the Lenin prize for his book *The Development of the Psyche* and recently he was given the Order of Lenin. This interview was conducted in his office at the University of Moscow.

*Valentina Tereskova once stated that youths in the Soviet Union are taught from their early years onward that the state needs them; that they have a special task in building a future society for all of the USSR.*

First of all let me stress that I am in complete agreement with the notion that in our land young people are fully conscious that they are needed and that they are useful for society on the whole. That is absolutely correct. On the other hand, I think we should not oversimplify this question. After all, this consciousness of being useful, if you want to put it that way, has to be cultivated through education. Our entire system of education aims at the cultivation of a feeling of necessity and usefulness. We teach them to take full part in developments in our society, and to be creative. Perhaps, I should say, we stress their participation in the creation of society. We do not underline this at one particular moment in their development. This would not be sufficient at all. This notion is rather the result, the fruit of our entire process of education, from early schooling, to adolescence, till the very end of their university studies.

I would like to clarify this. You did not bring forward the problem of the forms in which this participating in society develops. You do not touch, either, on the question of those persons in charge of this process of learning and how they assist in creating society. For the moment I will skip these questions.

*It is your interview, I only listen.*

I would like to say a few words, not so much as a psychologist, but simply as a member of Soviet society. For me, the primary question is the different forms in which youths take part in the creation of society at large. To me this is extremely important, also from a psychological point of view. It is clear
that we know of many kinds of human activities, which all represent different forms of taking part in the creation we are discussing.

You are referring to the creation of a global society?

No, sorry. For the moment I am concentrating on the development within Soviet society. In other words, the creation of a socialist life. We need an entire scale of all kinds of different activities. Among these are the activities of workers in industry, in agriculture, in science. I also think of workers in the service industries, such as medicine, commerce, transportation, and administration. From a historical point of view, or, to rephrase it more correctly, in the course of the history of society, ‘social ladders’ were formed. Likewise, evaluations of these activities developed. In other words, some activities draw a higher level of appreciation than others. They do not all possess an equal value to society as a whole, and this, then, determines the fate of the ordinary man. This we know to be a historical fact. Therefore we have to change these ladders. We have to create new value criteria. And what then is the principle at the base of these new conceptions? It is the quality of our activity, our productivity. Take the possibility of evaluating a wide variety of forms: the labor of workers, both in industry and in agriculture in their day-to-day tasks. If you could read our newspapers, you would notice the distinction in evaluations: the rewards. You would see that the appraisal of this labor takes into account even the simplest tasks in society. They vary, up to descriptions and evaluations of the most complicated scientific work. Basically, all things are evaluated by the same standards. Of course we sometimes note paradoxical cases, for instance, when an engineer with a university degree receives a smaller salary than a certain worker who happens to be highly competent in his particular field. This means that we evaluate work not in terms of techniques, or theories, but straight out of practice. In this way we underline that value is determined by the quality of the labor. Or the creative drive, if you wish. Do you understand? This causes deep changes in our society.

You will find in the popular press of most countries the standard clichés about so-called great personalities: generals, ministers, and politicians. Now, if you were to consult a newspaper in our country you would always find news about people who do ordinary jobs. Like an article about a railway repairman. We consider that publicity. The work this man is doing is just as important as any other. We consider such an article the reward. Publicity should be geared to public opinion. Exactly that. Everyone should be granted prestige. For that reason you will see, for instance, in a rest home of the finest quality people from all strata of our society, such as scientists or
writers, but also workers, ordinary workers. Men or women who do manual labor. Anybody. We would not make such a rest home available only to persons from a certain economic level, as happens in a society with separate classes. This is the basic difference with our country.

Nevertheless, we should not conceal the fact that at times it is difficult, also within our society, to combat certain prejudices that still exist in some families and that relate to the old chain of values. Some parents, for instance, still long for their children to reach the upper strata of society. But an upper class as such does not in reality exist with us.

_We who live in capitalist societies do not believe that Soviet society is totally classless._

I think it is necessary to define more precisely the classes we are talking about here. Socialist society maintains that it does not consist of classes contradictory to each other. In other words, a socialist society is devoid of classes that oppose each other or that exploit each other. It is an entirely different matter, of course, when we are speaking of different groups within society, as, for instance, the workers or the intelligentsia. We do have differences between inhabitants of cities or the population in rural areas, like peasants. But the differences are getting smaller all the time. And why? First of all, this depends on the economic situation in a given area, or it depends on efforts being made to industrialize agriculture. For instance, you can see for yourself that our country villages also have the kind of large buildings that we have in our cities.

In other words, the old ‘izba’ [hut] that used to be the standard type of dwelling in the countryside is gradually disappearing and is being replaced by modern dwellings equipped with every convenience that we find in our city housing. Electricity is being extended to our most remote areas.

_And telephones?_

A beginning was made. Immediately after our civil war we tried to set up a telephone network throughout the country. This process is constantly being accelerated.

_But won't there always be a certain inequality among all men based on differences in intelligence? What does one do with low IQ people who can only sweep corridors?_  

This is quite a complicated problem and we really have to understand what it is all about. Biological differences between people, like physical dissimilarities, will always continue to exist. These differences, based on
individuality, should actually become constantly more pronounced among societies consisting of opposing classes. All overrate according to different individual methods. Nevertheless, equality, in a social-economic sense, is still the basis of all individual development. This equality offers the chance to the individual to further develop himself. It offers a chance to reach full maturity, but not necessarily the formation of special characteristics of such and such a person or individual. What would seem to me most regrettable is the tendency to program people according to a set model, a standard type, which would represent the average person from one or the other specific group or class. Let's take for instance the famous American citizen.

In practice, he does not really exist. Nevertheless, people try to create a stereotype. The American citizen has to be cast, propagated, fixed in the minds of people. This then turns into a kind of equality which is really frightening. If you have the true equality of averages in the development of individual possibilities, then the individual will indeed assert himself and fully develop his creative capacities.

So far, I have spoken about changing values. However, I believe that a person's professional qualities should be understood in relation to this notion. We are dealing here with the notorious problem of a man's IQ, where so many kinds of ladders are constructed by means of tests and relying on instruments that are far from perfect. I would even say, in the process of establishing this so-called IQ, a person is being judged and studied one-sidedly. He is observed only on the basis of a number of superficial mental functions. More precisely: the tests are made to suit a mannerism. What is present in the genetic program of an individual will never be the same as what was acquired from the outside; that which characterizes a man and his possibilities. Our genetic hereditary peculiarities are the conditions on the basis of which our development takes place. For example: in order to see, I have got to have an eye. Or, a machine has a specific task. Will the machine execute this task? How will it be used? That of course is a different matter.

That cannot be read from the genetic type-cast. It is impossible to differentiate between preconditions and the realization of those conditions, since while they could be present, it is also possible that they cannot be realized. In other words, this means that it is quite possible that the familiarization with a culture does not take place. A person could possess all the organs needed to speak a language - all the organs can be present for the genetic program - but if a child simply does not experience the influence of the language, it will not learn to speak. Such a development would not be possible.

Is there a direct and unchangeable connection between genetic factors and
the results of environment? This is a rather complicated matter. We know of a number of cases that give the impression of many contradictions. Take for instance a child born blind, or one that loses its sight in early youth. These are conditions that would make it, under ordinary circumstances, impossible to have an intellectual development, but under special conditions and by special guidance and education development is quite possible. This means that there are no direct connections, while at the same time the limits are more qualitative than quantitative. In effect, we are not concerned here with the possibilities of development, but rather with the possibility to develop oneself in one way or another. Much depends on whether the direction of the development is correctly valued by society, the environment, the Umwelt. If society fails to correctly appraise the possibilities of development, then in a certain sense the development of the possibilities for further improvement are being limited. I do not believe that everyone possesses, for instance, the possibility of playing music or that each of us could undergo an esthetic development in activities concerning music. Not everyone has, or should have, the talent to play the violin. Perhaps a certain individual will, instead, find himself through an esthetic relationship with drawing, architecture, or other fields taken from the world of beauty. That is how the possibilities of the individual are being met.

Christopher Jencks of Harvard University studied the differences between whites and blacks. The gap existing between the races in America was said to be caused by cultural differences, not economic ones. If this were true, the developed nations should assist developing nations in other directions than by sending them technicians or huge sums of money.

First of all, we should accept that there are differences between whites and blacks. At the same time, people tend to forget that the differences being discovered through experimental methods or tests are only empirical observations. They tell us nothing about the origin of the differences, let alone explain the cause. The situation concerning development is for blacks completely different from that regarding the possibilities of development for whites. That is the first observation, a fact, the reality of the situation. There are of course differences which can be explained or pinpointed through a number of innate characteristics.

Hereditary?

Yes, inborn in the sense of being hereditary. I am thinking of traits such as differences in temperament, ways in which people react. I am sure there are many more differences. At times they are explained as differences in
temperament, or, as Pavlov has done, as features of the nervous system, which actually means shades of temperament but is explained from the point of view of the physiology of the brain. This type of explanation by Pavlov also answers another, second problem; namely the question of differences in the central nervous system. These differences definitely exist and they are hereditary as well. They are biologically determined. Therefore, I believe the theories that presuppose that types could be altered, for instance, through the central nervous system -

By chemical means?

Not necessarily. I would say through methods based on conditioning and so forth, this will not be possible. It will be impossible to change individual types, which formed themselves in the course of the evolution of living beings. And why not? Because they have sufficiently adapted themselves. If they had not, these types would not exist. They would have been destroyed by the evolutionary process. They are perhaps different, but nevertheless are self-sufficient. This is the important aspect, that they are durable, sound.

Take aggression. What can be proven from a biological point of view? I mean, for instance, by studying animal behavior. In manipulating several generations of cats, one could produce aggressively behaving cats, cats that will kill mice even if they are not hungry. These things have been done. But there is something else that should be well understood, and that is that this has nothing to do with speaking of aggression as a mentality. One could well imagine an individual who in temperament or character is not aggressive at all, but who is destined to be the one who will be ordered to push the nuclear button. At the same time, there could very well be a temperamental and aggressive person at work fighting against the possibility that the nuclear button would ever be pushed.

What conclusion can be drawn from these many kinds of genetic and biologically foreseen differences? These differences were engraved as they came into being. And therefore, the possible effect will be that these differences will produce various sorts of behavior. For instance: in the south, people will be more impetuous; at least the majority will be. All these difference produce a scale of human possibilities by which man's essence further develops. All this means a further enrichment. Which brings me to the subject of cultural relationships between people. I believe that rapprochement could be reached, for instance, through the transmission of certain national achievements. I am speaking of the enrichment of human culture in the most abstract sense, in a general human sense, in relation to the
totality of human beings that inhabit our planet. They do not suffer from these differences. On the contrary, they are enriched by them. I support the idea of the creation of an international conscience, but at the same time, the national conscience cannot by bypassed. There are, after all, codes of conduct, habits of conduct, human activities, that express themselves differently. There are so many different types - calm and quiet types, sensitive types, turbulent types - existing in cultural relationships and forming a ‘bouquet.’ In the lively communication between two of these types, we are confronted with an exchange of various ways of behavior. Thus, a number of traditions were formed. And as in all exchanges, a mutual enrichment takes place.

This is why I do not believe one can create a certain model or a stereotype based on traditions. One could ask the question, for instance, whether African music influenced our own music. The reply should be: certainly, it did.

_Claude Debussy was influenced by Indonesian gamelan music._

_Exactly._

_But returning a moment to human aggression. Are you not afraid that all cultural communication between people will vanish, once our natural resources reach the end? If food is no longer available to ever-increasing groups of individuals will aggression not reign?_

I am smiling and I have to explain myself. You are taking some entirely invented, totally abstract model. You did so since you presupposed that the sole manner in which people would be able to obtain food from others would be to fight for it. I do not believe this is always the case. Why not think of another model? Like a family, a family of six or seven. Suppose, they have almost no resources to live on. What would they do?

_They would consult._

They discuss what each of them could do to circumvent their crisis. Perhaps one of them goes into town to borrow some money. They discuss the possibilities of how they can get the water they need to irrigate their fields. Perhaps they should further economize. They would try to find a solution acceptable to all of them.

Your model is one, mine is another. Both are abstract. Now, I pose the following question: Which model is more realistic? Or in perspective the most effective? Which is the model that will deliver the best results?
But history shows us differently. Doesn’t reality outstrip hope? You seem to possess deep confidence in people and their wisdom.

I don’t believe it is possible to live, otherwise. How could one exist without this confidence? I have no other alternative. Once you are convinced there is only one disastrous alternative, this could result in madness, neurosis, suicide, whatever. One should not kill human beings through pessimistic ideas. That is suicidal pessimism.

Is the interest of young people in the Soviet Union in psychology, psychiatry, and the behavioral sciences growing and is it extensive?

I have to draw your attention here to two points. The number of students interested in these fields is increasing continually. I can give you a few figures. At Moscow University we have some fourteen or fifteen faculties [colleges]. They are very specialized; we do not have one faculty for all the exact sciences. We have separate faculties for chemistry, physics, and mathematics. We do not have one faculty for social sciences, but separate faculties for philology, psychology, and so on. This explains the large number of faculties. Getting into one of the faculties takes place through an entrance examination. Usually, the number of young people who want to study, let us say, mathematics or psychology, is larger than the available space. Therefore we have simple criteria. We take an examination from the number of people that desire to be admitted to a specific faculty. In this way we determine the number of students. Or, to put it more precisely, we determine the number of students that want to be allowed to study a certain field, and we find that in this way we always have about the same proportion of students that desire to study at one of our faculties and the number of available places.

Is that really true? Absolutely.

But the Literaturnaya Gazeta wrote not so long ago that these entrance examinations were so intensely competitive and difficult that they were causing a heavy strain on prospective students and causing psychologically enormous frustration.

I have to say that the exams have become increasingly difficult, since there are far too many applicants. The interest in these studies is much greater than the need in our society for specialists at such high levels.
As in Western societies, too many applicants for the same discipline. That is how it is in the USSR. Students are being asked to take these examinations. Is this the right way? I do not think so. No one believes this is the best solution, but there is no better method as yet. I agree with the Literaturnaya Gazeta that the exams are too difficult and that this leaves a bad impression on the students, who went out of their way to pass the exams in order to be admitted. This causes certain emotions, frustrations, if you wish. But perhaps the expression ‘frustration’ is too strong. For a student who wants to be a doctor and fails the entrance exam, this does not necessarily mean that his case is closed.

In the first place, he can prepare himself once more to be admitted the next year and study even harder in order to pass. Some students even try a third time. In our social system these opportunities exist. Students are allowed to follow special schools at all times so they can prepare themselves for the exams.

To return to the influence of society on individuals, B.F. Skinner believes that society could program the individual so as to improve himself. With Carl Rogers it is the individual that receives prime attention.

I am convinced that science and psychology in general will not develop themselves in ways proposed by Rogers or Skinner. There is another way.

Mao Tse-tung?
No, I certainly hope not. There is another way, another direction, another possibility of development in the human sciences, in which psychology is being scientifically studied. That is my view, but it is certainly a very personal one.

How would you formulate scientific psychology apart from the Rogers or Skinner approach?
Very simple. I intend to name you one point of departure. And if you want me to, I will cite this point in its axiomatic form. I cannot analyze the entire matter now, for it would take too much time. For me there exist several modes of psychological thought. The first is individual-society. For man, this means the social milieu; for animals it is the natural environment. The interaction between those two points is a theory of the two determinant factors. The second concept in that which is determined by the processes among men, the subject and the object. Now, Skinner's concept is that of
following the road from animal to man. All you have to do is to change the environment. But, nature, as represented by animals -

_Skinner's famous pigeons!_

Right. Skinner feels all you have to do in studying this interaction is to replace the animal side by instruments, by stimuli, that is all. But in reality this route of interaction consists of three points; three stages and not two. The individual, man, is point one, agreed. The second point is the other side: the object, the environment. But there is a third and decisive point. And this is difficult to express. Perhaps I should state my terms in three languages, even four. First: in Russian I would describe this point by the word ‘_dejatjelnost._’ In German it would be ‘_Tätigkeit._’ Mind you, I do not mean by _Tätigkeit, Handlung._ I really mean _Tätigkeit._ For the French, the word would be ‘_activité._’ the activity of human conduct. But even that does not explain it fully. Actually, I do not think there exists an exact translation for _Tätigkeit._ But a word was invented. The French launched a neologism. They now speak of ‘_l'activité objectale,_’ not ‘_objectif,_’ but ‘_objectale._’ The English would speak of ‘activity.’

_Human conduct._

Yes, human activity with objects. That approaches it, although it is not exactly the same thing.

And now the third point, the third phase. This is best described as the product of the influence of the individual on the environment. Seen from this point of view everything changes. The transformation of the environment brings to the individual itself a transformation in the sense that the individual possesses a notion of his environment. And the formation of this notion cannot come into being otherwise than via human conduct, human activity. For instance, a person can possess an image of something on the level of the most differing abstractions. Now, in order to have a tangible image, an image that can be touched... let us say I have my eyes closed. I am doing something with the object. I form the image, I translate it, I give it a subjective form, the form of reflection of that object. Then, one discovers with this knowledge, obtained by touching, that the process exists in all kinds of modalities, even in the activity of the visual system, and other kinds of perception.

_By the individual?_

Right. But at the same time, while a person works with objects, we
experience another transformation. An image expresses itself in phenomena, in objects that belong to the milieu, the environment. In other words, we see here a double movement. And during this process we are obliged to keep an eye on one very important aspect. When I speak of an object, I do not necessarily associate this object to material things. It could very well be an idea, a concept if you like, or music, whatever you want. I do not limit myself to material things, although I do have to stress that material objects are always the beginning. However, during the course of development spiritual objects are formed. Through the realization of the activities with these objects, images are formed, both because of the objects, and as a result of the objects. They also act as instruments in the forming of images. They are used, but always in a double sense. They form a circle, but not a closed vicious circle. The circle is interrupted by the third point that I mentioned. The image is never exact or correct. There are always confrontations with objects, not necessarily material objects. There still is this indefinable process of the activity of man, this Tätigkeit in the spiritual sense. There is a resistance operating, guided by logic. And this entire new process results in the operation of what I have indicated by the third channel. We have to act. A man realizes his act. The realization of human acts leads to human activity. That is precisely the third point. The world intervenes in this process.

Dr. Margaret Mead remarked to me, ‘But who programs Skinner?’

Well, I would like to amend that question. Who has the capacity to program the transformation of the world, or human culture, rather, in the way Skinner sees it? In other words, in the sense in which freedom, complete freedom, is understood by Skinner, in this world of comfort, a term used by him, isn't it? A world of prosperity. Who creates this culture? Skinner is not very clear on this point. What will be the social trends that will influence such a programmed culture? What will be its contents? Its development? This means you would have to conceal the coming into being of an elite. Otherwise, Skinner's entire scheme would be incomprehensible. Someone would have to program the entire movement. Who constructs this new culture? And now we come to an abstraction which in my view is completely impossible.

Culture needs spreading, propagation. The possibility of propagating such and such a culture should be considered in the light of who owns it. In a society divided into classes, culture belongs to the upper class. What happens to the press, television, and radio because of such programming?
What happens to the interests of social groups? Or those of the large industries? Skinner says that we have to instruct them, educate them in the spirit of a culture that takes into consideration the future of man and society. But what happens to the interests involved? Let us take a simple example: the production of automobiles. The entire social group, the automobile managers, have but one defined interest, and this is to sell as many cars as they possibly can. So, if one wanted to reprogram the automobile industrialists, one would have to tell them that they should sell fewer cars. The income from the production of automobiles would have to be sharply reduced. If I were to carry out, as an automobile industrialist, this request to reduce production, most likely my own family would ask the authorities to lock me up or have my head examined by a psychiatrist, because the income of the family would suffer from such a decision. This idea is completely impossible. The husband, the brother, the nephew, all have known wealth stemming from the production of automobiles for probably two or three generations. It would be impossible to carry out such plans because they would oppose them. That is the reality of life. What Skinner says in his book *On Freedom and Dignity* is pure fantasy. Skinner fabricates an abstraction from life in societies in the contemporary world. Culture as an abstraction - as if there were no classes or no differences in cultures! The technology of compartmentalized behavior - that is Skinner. In fact, it is only the semblance of technology, for technology is based on mechanical and chemical laws, which are ironclad and inescapable. These laws are valid for the construction of machines, for the establishment of industries. When you start to apply technology to human activity, it is completely senseless.

Another consideration is that we want to see a human creature in a human being and not merely a robot. A human being is a social creature possessing consciousness and realizing his aims in life. Man is an active being, conscious not only of himself, but of performing his responsibilities toward other individuals in society. Man must struggle for the happiness of all of mankind, not discriminate, and he should be fully aware of the barbarism of war and all kinds of violence.

*Don't you believe that scientists should not continue to populate the ivory towers of universities, but be educated in the full understanding and awareness of their responsibilities toward mankind as a whole?*

Yes. I support the idea of making the humanities a part of the curriculum of, for instance, chemists, physicists, and other students of the abstract sciences. I do not believe that the preparation of today's scientists has been sufficient. Will the students that are now leaving our universities all over the
world be ready to meet the twenty-first century? If we think at all of the future of mankind and its survival then it will be absolutely necessary to end the system of only partly educated human beings.

Partly developed people.
Yes, just that. It is not a matter of being responsible or not. How can we demand responsibility from people who have not met their social reality?

Carl lung called the bomb dropped by scientists and militarists on Hiroshima a disaster in man's psychology first, and a disaster in technology second. But when I discussed this with one of the scientists responsible for this explosion, Edward Teller, he told me as late as in 1972, that 'perhaps' the dropping of that bomb was a mistake.

Frankly, I must confess that I prefer my own formula. Hiroshima is also the problem of too specialized development among scientists. How can I hold a scientist responsible for something concerning social problems and questions concerning humanity, about which he never ever learned anything? He is simply blind to the ideas of others. Specialists of this kind in certain fields are absolutely and totally blind from a social point of view. This is a matter of an educational system that is entirely wrong. We have to change it.

Toynbee told me that many historians refuse to accept him as being too much of a generalist. He believes that scientists should be taught sufficient principles and be given enough information about the totality of science to understand basic matters that concern the entirety of human problems.

I am convinced that heads of important scientific teams, or heads of sections, departments, faculties, research laboratories, or whatever comes with universities should be sufficiently prepared for such important tasks and functions by possessing a broad frame of knowledge. There should be strong ties between research and education. That is most important, and not solely for the sake of teaching. It is often maintained that in order to be able to teach, one should be a researcher. This is not so. On the contrary: In order to be an efficient researcher one should also be in a position to teach, because in teaching, one's spiritual field of vision is continuously broadened and filled with new information. One's mind does not run the risk of transforming itself in too narrow vistas. When one is inclined to stick strictly to problems that are directly involved with one's subject of research, which often is a small part of one particular subject, one is inclined to concentrate only and too much on this matter of research. It's as simple as that.
19. Masaya Sato

Professor Masaya Sato was born October 27, 1932. He was graduated in 1963 in psychology from the Department of Sociology at Keio University in Tokyo. He specialized in experimental psychology and could be called a Skinnerian in outlook. He is member of the Japanese Academy for Psychology, member of the Japanese Academy of Animal Psychology, and member of the Japanese Academy of Conditioned Reflexes. He took part in a special team, known as Cosmo Brain, at Keio University - where he teaches - about which details are given in our conversation. Professor Sato estimated that present-day Japan counts some 4,000 psychologists for a population of well over 100 million. Clinical psychologists are only to be found in some of the well-known Japanese hospitals. One of Professor Sato's best-known books is Principles of Behavior and Their Application for Everyone.

What exactly is the Cosmo Brain group of which you have been part since 1971?
You could say we are mostly behavioral scientists, but there are also some businessmen who are interested in the practical application of psychology.

What is the goal of this group of ten specialists?
Most people are interested in what I would call commonsense psychology. Our newspapers and popular magazines are full of this kind of easily understandable explanations of psychology. On the other hand there is small interest in deeper approaches to scientific psychology.
Is psychology a popular study among young people?

I guess that there are perhaps some four thousand professional psychologists in Japan. About one-third of these work at the universities and teach. We have no practicing clinical psychologists in Japan. There may be some of them connected with a very few hospitals. But the profession of the psychoanalyst is not protected by our social-medical system, which means that even a layman can perform psychoanalysis. In other words, traditional Japanese academic psychology is essentially experimental psychology. The scientists are interested in sensory perception and learning processes, but not in the real problems of the human mind, of human behavior, or of human society.

Is this so because Japanese tradition has it that men and women prefer to keep their emotional problems to themselves?

Yes.

People are ashamed of their emotional problems, then, and hide them. But does this include from doctors?

Yes, that is correct.

So the real goal of the Cosmo Brain group could be -
- to study the real problems of human behavior and human society and to explain the workings to a public as wide as possible. Our aim is to bring modern psychology in direct contact with the real problems of today's society. To make these problems more accessible for people to examine them and to understand them. In other words, to scrutinize today's realities by modern psychological means.

Cosmo Brain, then, tries to obtain a wider appreciation among the Japanese public for these matters.

That is one of our important goals.

You concentrate no doubt on the realities of modern Japanese society.

Yes.

And do you feel that your group has achieved some results among the general public during the first three years of its existence?

To my regret, we did not. The Japanese do not seem to be interested in a scientific way of thinking or in the system of scientific analysis. They are not
interested in obtaining more knowledge about themselves or about others. Of course, there are the usual superficial contacts among people, but they do not examine each other's problems in depth.

**Have some of your findings been published?**  
Not yet. Perhaps in the near future, two or three years from now.

**Psychiatrist José M. Delgado believes that the most important task for modern science is to protect the individual in our exploding society.**  
I completely agree with Delgado's view.

**Do you feel then that in the last part of the twentieth century, Japan with the explosion of its technoeconomic society, succeeds in protecting the soul of individual young Japanese?**  
This is an extremely difficult question. It is a very dangerous situation. While young people are growing up, we destroy them at the same time. Perhaps the most difficult problem is to prevent culture from being destroyed simultaneously. Without culture a human being ceases to be human.

**But there is the influx of American pop-art, rock music, blue jeans, and so on. Watching Japanese television makes this clear. How does this all affect your unique culture?**  
These are very dangerous matters indeed. But it should be realized that our society is a very mixed one. It is unique because of its uniformity and its homogeneous forms. Because, as you well know, prior to Japan's modernization and entry into world society we had a history based on the isolation of our islands, while we knew no division into social classes as in other Asian lands.

**As in India?**  
Or Europe. This basic homogeneity is so deep and strong that when some of us are being influenced, for instance, by American habits or American music, they drag everyone else along with them. Perhaps this is mostly an unconscious process, but it happens this way. To be the same is the way to live. The American way of life, from the way youngsters dress, to the use of Coca-Cola, or the easy way in life-attitudes is considered convenient in Japan, or to use Skinner's term, is ‘reinforcing.’ So, especially following the outcome of World War Two, with most people in Japan hungry and
having little or no hope for the future, when the Americans arrived with their chocolate bars and cigarettes, that is where the start of the American influence on Japanese life began. Our society, in fact, has only a very thin veneer and does not run deep. If parts of our society decline, begin to move downward, it has no strong supports elsewhere and will move downhill all along the line, whereas other societies, if one part declines it will be sustained through other sectors.

*Would you say then that the Japanese lack a full development of inner feelings or inner strength?*

Yes, and these American imports offer us only pleasure, but do not give us joy, human joy. After all, pleasure remains on the level of animal life. Joy makes a human being truly function.

*That is a poetic concept. Were aspects like these also included in the studies of the Cosmo Brain group?*

Not systematically.

*Would you say the Japanese are pragmatic?*

We Japanese have two sides: we are at times pragmatic and at times superpragmatic.

*What specifically did your study group consider in relation to the Japanese mind?*

We analyzed psychologically the world we are living in. We tried to analyze reality, day-to-day life. We saw two major streams in today's society: one is the scientific trends, and the other could be described as the liberalization of the individual, who, in the case of Japan, is now free from the feudal system of old times. The United States is an appropriate example of this development, because after freeing themselves from a colonial power, Britain, they gained their particular form of liberty. I think that the crisis of our times is caused by a collision of the liberalization of the individual and the rapid scientific developments we see all around us. As a result of our highly developed modern technology, man is more and more used and even controlled by machines.

For instance: I recently visited Paris, and what struck me was the different way in which the Métro operates in comparison to its Japanese counterpart in Tokyo; subway doors open automatically when a train stops. Everyone waits till that happens and then goes out. In Paris I noticed that the doors can
be pushed open by subway riders. In other words, to again borrow Skinner's term, what Parisians do is engage in 'operant activity.'

The disadvantage of our modern age is that there is little or no room for operant behavior on behalf of the individual.

*In other words, what you mean is that modern society seems to do everything for you and very little is left to personal initiative. In what ways do you feel this situation further damages the development of the human personality?*

When there is no room left for personal initiative, operant behavior, human beings will become more and more passive. Through operant behavior people display initiative, are active, and adapt positively to the environment. The development of human history is 'operant history.' Operant behavior made man into what he has become so far. But if operant behavior should be lost, human beings will become mere appendixes of machines.

It is apparent that nowadays we have many choices. We possess what we call 'free' choices. But actually, we cannot choose. We hesitate to reach a decision. How to select among the many possibilities? In a way, we seem not to know anymore what decision to make. This turns us toward the behavior in the 'operantless age.'

During the days of our feudal system, which was a special Japanese peculiarity, there were no choices to make. Take our traditional handicrafts. Each person learned to do one particular thing and had no other choice than to do the same thing over and over again.

*From generation to generation.*

Exactly. But now, in our modern society, it is hard to find such a handicraft specialist anymore. Granted that the human being has become superior to animals, perhaps the time has arrived to investigate deeper why this occurred. One of our main features is language. Let us touch Skinner's theory of the discriminative stimuli.

The question arises as to how human beings or animals react when there is no discriminative stimulus at all. Human beings will create them whereas animals, which are not creative, will not. Being able to create discriminative stimuli means two things: language and creativity. And, because humans can create discriminative stimuli, I agree with Skinner that language is a discriminative stimulus. Because we possess language, we can describe, for instance, our environment. In Skinner's words, this means we possess a 'verbal-tact-operant.' In relation to the environment, we have the ability to create, while with the assistance of language, we do create our culture.
And Noam Chomsky?
I do not feel we should think in terms of Chomsky versus Skinner. Chomsky considers different aspects of the uses of language. I have not read Chomsky's thoughts on the relationship between language and culture. Chomsky himself stressed that the purpose of language is not only communication, as you have mentioned yourself.

Skinner and Chomsky have various thoughts in common. Similarly, Skinner and Konrad Lorenz perhaps have entirely different backgrounds, but nevertheless they both end up in recognizing the importance of culture in human development.

I just had this thought: Lorenz based much of his research on the study of geese; Skinner spent half his life watching pigeons; Mao Tse-tung has been working with 800 million people. From which ’experiments’ do you feel we can draw the correct conclusions?
I prefer Skinner among the three.

But, you are aware of course that Skinner is accused of maintaining a fascist approach to the programming of society. Margaret Mead asked in my conversation with her: ‘Who programs Skinner?’ In other words, doesn't Skinner's theory conjure up Orwellian visions of Big Brother?
That indeed is a critical point. To some people it looks as if Skinner would like to play God. But this is not what he really means. Skinner's principal point is the interaction between organism and environment. He believes that we must behave as operantly as possible towards our environment. The environment, according to Skinner, selects good behavior. If man fails in this respect he will be destroyed.

Would you describe ‘good behavior’ as being in harmony with the environment?
There are three main factors: life, survival, and human culture. If one of them is destroyed, the others will follow. So the code should be: love oneself and love life; to love human society and to love nature.

But what still bothers me is the comparison between Mao and Skinner. I guess one important difference between them is that Mao did possess and develop the power to program and guide one quarter of mankind into a livable society, while Skinner continues to write books, and plays the organ in his basement.
Mao has applied Skinner's techniques, but I don't know whether or not he is fully aware of it.
Also in brainwashing?
   Indeed. Mao developed a highly efficient brainwashing system for the Chinese people.

If anyone has succeeded in promoting survival - which after all is also Skinner's principal aim in life, the survival of humanity - it has been Mao Tse-tung and his Little Red Book guide to life for the Chinese people, it seems to me.
   That is correct.

You seem to be guided very much by some of the same theoretical background as Professor Skinner.
   Well, I do very much agree with Skinner's theory on the vital importance of operant behavior, the appreciation in life of love and beauty, and the necessity of being sensitive to one's environment as conditions to the survival of man. If human behavior were no longer reinforced, it would simply mean the end of humanity.

Are you optimistic or pessimistic about the human race?
   I am neither a pessimist nor an optimist. If the human race came to an end, owing to our nature or to some peculiar feature we have, we would probably say that we could not help it. We rule the world. But if one looks at the present state of affairs on this globe, then we could very well conclude that man is heading in the wrong direction - and not necessarily by his own doing. It could very well be that man some day will return to his original animal status and that will be the end.

What do you see as the task or duty of the media?
   The tendency is not to have answers or a response to our problems right away in the mass communications media. When you create a television program, like the one you made on the Club of Rome, no answers are given immediately.

No feedback.
   It is behavior without reinforcement.

In Skinner's terms, television does not lead necessarily to 'positive reinforcement.'
   Television is mostly passive, with very little feedback. There is no
response. It could become harmful if it stimulated to action. So, in order to maintain operant behavior, man should be conditioned from very early childhood onward to be active, to be fully alive. Of course, this lies within the responsibility of adults and parents. Overprotection of kids is very bad, even dangerous. It destroys their progress toward active behavior.

*It makes them passive, in other words.*

I believe, for instance, that television is good for educated adults, but destructive for growing children.

*You realize that in the United States young and even very young children spend an average of six to eight hours a day before the television.*

That is very dangerous. It creates passive, nonoperant behavior.

*Do you believe modern mass media could assist in helping promote positive reinforcement of behavior in readers or television viewers? And I do not mean by broadcasting quiz programs!* 

People should be taught to think for themselves. A person can be watching television and actively using his brain at the same time; in Skinner's term, watching television in 'covered-operant,' or thinking.

*In other words, the mass media should be geared much more to making the reader or TV viewer think for himself. How does one stimulate individual thinking?* 

By conditioning.

*How?*

All behavior should be reinforced immediately by interaction with others.

*Then how should we revolutionize our educational system?*

One way is to confront children with the pleasures of creating things. Children should do things with their hands. They should be simultaneously watching others doing things. They should be actively involved.

*So we are back to the handicrafts from feudal times all over again.*

As a matter of fact, this topic is something that should be actively considered by the Club of Rome. I think what they should point out more than ever before is what the coming crisis means for you and me; my family and neighbors.
That is the real crisis we are confronted with: reaching every individual on earth.

What the Club of Rome should determine is, What, in effect, is the crisis in which the individual, the human being, finds himself? What does the crisis mean to you and me, the family, the school, the community, the people as a whole?

We must learn to think of the community as a Gemeinschaft. Owing to their feudal system of past times, the Japanese had quite a good start in this direction, although from observing the Japanese in our streets today one would hardly say that they originated from a small community system.

I find your people rather cold to strangers, a visitor like me.

Not cold. We are perhaps rather reserved toward strangers. We attach ourselves to very intimate and personal things. We are often very close to each other. And if we do have these good sides, we of course have our dark sides like everyone else. What we should do now is examine what we had before; we should make efforts to rethink our culture, not just say that it was an outmoded feudal system and rightly has been changed. We have to analyze the constructive aspects of our culture and revitalize them. Do you know the meaning of the Japanese word ‘amae’?

No.

Amae means the relaying of confidential feelings without the use of language. In other words, the person spoken to is expected to understand what I want to relay without using words. We Japanese harbor our inmost feelings inside ourselves, inside the soul. We often find ourselves at great difficulty in expressing ourselves.

What, in your view, would be the most appropriate way for foreigners to study Japan; to make a beginning at understanding your very very special ways and culture?

One way is to understand our enka songs. We, for instance, feel that European music is quite mechanistic, machinelike, while our traditional Japanese music, which you find to some extent in popular enka, is perhaps also ‘constructed,’ but nonetheless reflects the delicate mind of the Japanese.

Do you feel Japanese youths are aware of some of the things you have just explained?
Unfortunately, people do not change as quickly as their environment does.

To bring them back into harmony with their environment: that is our task.
Indeed, and here I am a pessimist.

20. Hiroshi Minami

Professor Hiroshi Minami was born in 1914 in Tokyo. He studied psychology at the universities of Kyoto and Tokyo. From 1940 to 1947 he was in the United States and obtained a doctorate at Cornell, where he conducted research at Cornell's Behavioral Farm (1943-1946). Since 1948 Professor Minami has been connected with Hitotsubashi University in Tokyo, where he teaches social psychology. In 1950 he became director of the Institute of Social Psychology in Japan, in 1962 he obtained a degree in literature at Kyoto University, and in 1964 he was appointed director of the Institute of Social Behavior. He is secretary-general of the Japanese Psychological Association, president of the Japanese Society of Social Psychology, member of the Executive Committee of the International Association of Applied Psychology, member of the Japanese Society of Psychiatry and Neurology, and holds posts in other national and international organizations. Professor Minami has published many books and articles, some in English, including Psychology of the Japanese People.

Against the background of traditional values in Japan, how do your people coexist with modern conceptions of democracy? Is there a clash? Or are the Japanese masters in symbiosis?

Willem Oltmans, On Growth Two
I think Japan can not be democratized until we abolish the imperial system.

You mean the leftovers from feudal times?

The Japanese ruling class is still utilizing the imperial system, which blocks the democratization of the Japanese people. An effort is made to democratize the imperial system. In the view of some people we will continue to have a kind of mass imperial system in our mass society. Therefore, it is very difficult for the general public in Japan to abolish the imperial system because it is deeply rooted in the Japanese mind.

I was in the United States when the war broke out. I was contacted, at Cornell, where I was studying, by somebody from the American government. Washington wanted to know about the possibility of the Japanese people resisting the invasion of American or Allied forces toward the end of the war. They assured me that the Japanese practiced deep-rooted emperor-worship. I answered that the Japanese people were living under very tight wartime controls. They were forced to worship the Emperor. But I did not think they would really miss him if the Allied forces decided to abolish the imperial system. Nevertheless, the Americans believed that Japan would fight until the last man -

- to defend the Emperor?

To defend the Emperor. When the war ended, the American forces landed prior to the Soviets. My guess is that the Americans decided to bomb Hiroshima and Nagasaki so that they could end the war before the Soviets had the chance to reach Japan; it's quite logical and possible.

Then a terrific argument developed in the American government whether to abolish the imperial system or not. They decided to keep the Emperor in order to block a social revolution after the war. The American occupation policies did succeed in ‘democratizing’ the Emperor system by utilizing mass communications, such as permitting public appearances and showing the imperial family on television on various occasions. Another tactic was to allow the showing of sumo, our national wrestling competition, on television.

Even the ‘love-romance’ of the crown prince was utilized for the humanization of the imperial family and was widely publicized. At the time the Americans knew that Mao Tse-tung would defeat Chiang Kai-shek and that China would go socialist. They felt they had to keep Japan as a stronghold to oppose continental China. That is the reason Washington decided to keep the Emperor after the war. Many professional insiders tried
to convince the American government to abolish the imperial system, because they felt that it would otherwise be impossible to really democratize Japan. But, obviously, these specialists on Asian affairs were defeated. I recall during the first or the second year of the war the posters in the streets of Ithaca, where Cornell is situated. They showed three pictures: Emperor Hirohito, Hitler, and Mussolini. All three had red crosses over their faces. The captions read: ‘Hang Hitler,’ ‘Hang Mussolini,’ and ‘Hang Hirohito.’ I will never forget the cross over the face of Hirohito.

And today they want him to make a visit to the United States.

It seems quite clear that the Japanese people never realized that the Emperor was a war criminal, or war criminal number one. At least that is my opinion. They still think the Emperor was not responsible for World War Two.

When Hirohito came to Holland some years ago, it was said in the press that the Emperor had tried to stop the war.

He was the highest commander, the Commander in chief. I don't think he really made efforts to stop the war. Anyway, all information about the Emperor is controlled, even now, so nobody can tell with certainty in Japan; we can but guess. However, according to the detailed analysis of the Emperor's wartime activities by David Bergamini in his book Japan’s Imperial Conspiracy, the Emperor took an active part in planning and executing the 1941 to 1945 war. This book was translated into Japanese in 1973, but is not widely read and discussed despite its challenging contents. This might be another proof that criticism against the imperial family is still taboo with the general public.

But the true democratization of Japan will never be carried through as long as these feudal leftovers remain?

That's my opinion. The influence of the Emperor, of the imperial system, is increasing in Japan. Social control is getting tighter and tighter despite the so-called democratization of the imperial family or the imperial system. The Japanese ruling class has firmly decided to keep the Emperor until the last day of this earth.

How does the race for material values, now so obvious in America and in Western Europe, affect the new generation in Japan?

Have you noticed, for instance, the blue jeans fad? It seems to have a kind of fascination, because Japanese youth are quite sensitive to European or
American life-styles. But it remains an imitation and is quite superficial. For example, in the United States, long hair and superstars and so on are the symbols of indirect resistance or protest against Nixonian militarism.

*We can say criminal Nixonian militarism. He is war criminal number one today.*

Yes, that's right. Long hair is a protest against the crew cut of soldiers; the glittering clothes young people wear in America seem to be a protest against uniforms. This is therefore quite understandable so far as American youth are concerned. But while our youth are quite apathetic politically speaking, they are most eager to adopt American life-styles.

*Why don't they question the system? Why don't they study how it functions?*

They are very pessimistic or, rather, indifferent to the political scene, because they know Japanese politics are controlled by the establishment, the ruling class. They are not too well informed about the political situation in Japan, because we still have strong controls over the press and the news media. Our student movement was suppressed by the government as well as the university leadership. As a result, only the ‘new left’ students are still active, but they fight among themselves in factional opposition. Moderate or mildly motivated students belong to the Communist Party or other political organizations, and are not acting directly in violent opposition to university administrations.

*Is there an underground press?*

Well, I know there's one pamphlet published by an unknown citizen in Nagoya, who criticizes the imperial system. But that's the only one as far as I know. There are also various books condemning the Emperor as a war criminal. One was written by a former Japanese soldier. He once tried to shoot the Emperor.

*He actually tried to shoot Hirohito?*

Not with a real gun - a toy pistol. It was a sort of satirical act - a joke - because he thought that the Emperor was not even worth being shot. By the way, Hirohito was really shot at by a Communist, Daisuke Namba, in 1924, when he was still crown prince. The bullet missed, and the assailant was sentenced to death by hanging.

*But are students not more conscious of what happens around them here, as well as outside Japan; of trends in China, in Western Europe? Why are they*
so pessimistic about changing the system. Is it too deeply rooted, this feudal authority?

Authority in Japan, the older ruling class, is losing its power, but slowly. Japanese youth don't trust the older generation. There is much corruption in political parties. But still, they don't fight. They seemed tired or bored with the general situation in Japan. So they look for outlets in music, sex, or drugs. There are very tight controls in Japan. The police is quite strict. I myself am teaching at a university. Not only at my university, but at all universities, there are small groups of students who are quite active in the political field. Particularly, the Communist Party is organizing youths. They have grown quite big.

*When I was in Japan in 1970, I witnessed a demonstration of youths against the so-called American security pact. What amazed me was that thousands of demonstrators came down a main street of Tokyo shouting and waving flags. However, when the traffic light switched to red, they stopped. In Europe they would have pulled out the traffic lights!*  

I think this depends on the group. The youth movement led by the Communist Party is very careful to maintain public order. The students of the new left are therefore critical of the Japanese Communist Party; they denounce everything. But they are a minority. Some new left students belong to the ‘Red Army,’ which was several times involved in Arab guerrilla activities, like the Tel Aviv airport incident and a series of hijacking incidents. Obviously, they are not satisfied to limit their activities to Japan, and are trying to join the ‘simultaneous revolutionary movement’ anywhere in the world. Miss Fusako Shigenobu, a former girl student, for instance, is a well-known Red Army leader who lives somewhere in Europe and is said to be active in these international activities.

*Would you say a confrontation of generations is in full force in Japan?*  

You mean between the old and the modern young?

*Yes, a real clash.*  

Except for the most radical part of our youth, this collision is cultural or social, but not political. For example, young people are very idealistic about new music. Their fathers and mothers simply cannot stand their children making so-called modern noises. They are all complaining about it. But the young people don't give a damn.

*That seems a new symptom in family relations in Japan.*
Well, yes, reckoned since World War Two, of course. It is a cultural confrontation. The older generation is constantly complaining about the manners and the way of life of youths. But this is not only among Japanese parents. All parents in the world entertain the same complaints. We have seen this happen in history since ancient times. Fathers are considered by their children as being either cold or incompetent in matters of family education. Many youngsters complain that their fathers do not scold or criticize them. They are rather anxious to be guided by their elders. This lack of leadership on the side of the elder generation is the main cause of the generation gap in Japan.

There are also many examples of the dubious behavior of elders, such as bribery, tax evasion, ‘me too,’ price increases, and the recently created so-called oil crisis.

*What is happening to the age-old Japanese tradition of love of nature?*

The Japanese people are supposed to be nature lovers and nature worshipers. But I believe they don't give a damn about nature. So we have quite a contradiction here. I think this is based on misunderstandings on the part of foreigners. Of course, Buddhist teaching says we should unite with nature and the universe. But perhaps you have already noticed that the Japanese are indifferent to Buddhist doctrines and ideology.

*But are not seventy percent of the people officially traditional Buddhists?*

It is a kind of formal approach to religion and is not deeply felt or even Buddhistic. The Japanese adore all kinds of ceremonies, but these are superficial, social traditions. I always say that our people are functionalists. Japanese gods have many different functions; it's a kind of division of labor on their part. In the house there are many gods. A god for the kitchen, a god for the fire, and so on. Even for skin disease there is a particular god who is supposed to be able to cure it. The emphasis is on material profit. This is the reason there are a lot of gods and Buddhist statues and all kinds of religious institutions in Japan. Moreover, there is also a kind of division of labor among the three main religions in Japan. In matters of birth, weddings, and other rites of passage, such as initiation ceremonies, the native Shinto religion is responsible, whereas the Buddhist monks deal with matters of death: funerals, ancestor worship, and the memorial service for the deceased family. On the other hand, many young couples prefer wedding ceremonies at Christian churches even though they are not Christian. Some of them even travel to Christian churches in Europe for this. It is considered fashionable.
From reading your book Psychology of the Japanese People, I gather that there are many ancient traditions in Japan which, on the contrary, teach that one should not leave material possessions behind; that possessions mean nothing. This is not really a contradiction. We still put our emphasis on this side of existence and not on the other, which is the real reason why we must always preach or talk about the other side, about heaven. Of course, this kind of teaching was originated by the ruling class to convince the Japanese masses to be very frugal. Don't waste money, and things like that! But the Japanese people are now changing, as you may have concluded from my book. They are now trying to have some leisure, particularly young people. Young people emphasize money, because they say, if we don't have money we cannot have girlfriends or we cannot enjoy American clothes; we cannot buy cars. They are very frank about wanting to have money; they think it cannot betray us. That's one reason. They have lost hope in the older generation and are looking for something solid.

It gives them a feeling of power.

Power, security, and, of course, material advantages. Money is their new god, and I don't blame them. So, one segment of modern Japanese youth seeks money. On the other side, the other extreme, there are the radicals. They have a political conviction or ideology and are even willing to sacrifice their lives. The majority of Japanese youth emphasize their private life or individual profit and are becoming more and more individualistic and egoistic. That's why they don't give a damn about the political situation; they think it is not their business. Money is more important than any kind of ideology. Until the recent oil crisis, rapid economic growth was accompanied by the slogan, Spending is virtue. Undoubtedly, this idea was welcomed by many, young and old alike. But since the crisis, the Japanese government has introduced a new saying: Thrift is virtue. However, young people seem to have no ears to listen, since they are convinced that this ‘crisis’ is mainly caused by manipulations by big business. Here we find not only a confrontation between generations, but among members of the same generation.

Between the small, radically advanced, politically oriented groups and the masses?

Yes. My point is that the generation gap is not serious, because in all history there has been one. But in this case there is a confrontation among
young people themselves. It's considerably more tragic. The young radicals try to kill one another.

_I asked Professor Skinner what he thought of Mao Tse-tung's method of organising both politically and socially the youth of China. He called it perhaps the most revolutionary experiment we have seen in the history of mankind. What is your view of this enormous Chinese younger generation being prepared to accept a new kind of social consciousness? And, next door, there is the almost completely materially oriented Japan. _

I was the first Japanese scholar who visited China in 1952. I was immediately condemned by our government.

_You were called a Communist._

Prime Minister Yoshida sent me a special letter of reprimand. I was not dismissed by the university, but many people criticized me. I wrote a book on China telling the Japanese public there were practically no flies in China. I said that there were no drunkards, gambling, or opium. The public reaction was, What Professor Minimi writes is impossible! To many Japanese who were in China before the World War Two, it seemed incredible that the revolution could have changed people so completely - not only materially, but above all mentally. I think there are two ways of liberating a people: First the material revolution and then the spiritual revolution. That is one way. Or, spiritual revolution first and then the material revolution. A third method is, perhaps, the simultaneous or parallel material and spiritual revolutions. In the Soviet Union the material revolution went quickly, because it occurred after World War One. The spiritual revolution came much later. Maybe it came too late, so you see the effects now. But in China, Mao Tse-tung fought the reactionary forces for quite a long time, about twenty years. He and his revolutionary army tried to convince the Chinese masses why they were fighting the nationalist or reactionary forces all over the Chinese continent. They went everywhere and fought everywhere. They tried to educate the masses first. They tried to educate captured nationalist soldiers. In those twenty years they tried to combine the material and the social revolution with a spiritual revolution. It is not a very rapid method; it represents a quite long, slow, and very well planned political education. That's the reason the Maoist revolution succeeded. The Chinese masses readily became socially conscious. They became decent in their manners and stopped vices such as opium as well as other behavioral deviations. I think it's ideal to have a so-called simultaneous or parallel liberation, a combined social-political and spiritual revolution. Many people felt it would
be impossible for the Chinese masses to change in such a short period, let us say in half a century. But this was a serious mistake.

When I was in China in 1952, I was impressed by their politeness and their obedience to the older generation, considering that Mao and his comrades always taught young people that they were allowed to have different views from their fathers or other people in general, above all in relation to political or ideological theory. But humanly, they had to respect the older generation's experience. Experience cannot be gained in a short time. Even though the father or older person was reactionary in political ideology, or stubborn in refusing to recognize a new system, they had experience in various skills or in some form of knowledge. So the young were taught to be modest and to learn from the experience of the elders.

Psychiatrist Doi Takeo approaches culture and environment from the point of view of individual psychiatry. Would you say that Mao's success in his revolutionary methods could be traced to a basic approach of working through raising the consciousness of the individual to understand the reasons why the revolution is being fought?

As I mentioned, Mao's revolutionary army fought quite a long time all over the country. There were very strict rules concerning their contacts with the rural people in the fighting zone. They therefore made a favorable impression in contrast to the corrupt nationalist soldiers of the Chiang Kai-shek Kuomintang. In his writings of the 1920's, Mao had already pointed out that the emancipation of women, freedom from religion and superstition, universal education, and the abolition of gambling and opium could only be realized under a proletarian dictatorship. Accordingly, he emphasized the supremacy of political revolution over the spiritual revolution. But Mao tried to run these two kinds of revolution simultaneously as much as possible, even during the civil war. He encouraged, for instance, a new movement in the theater and he showed a deep interest in other literary activities. The Great Cultural Revolution is a combined effort of political, economic, and spiritual revolution, and the word ‘Cultural’ is said to include all aspects of life. For example, the question of the Confucian legacy as a reactionary ideology is today intensively discussed in government, army, rural, and industrial circles as the vital problem which influences the life and thought of everyone in China.

But how does all this relate to the contemporary restlessness of Japanese youth? They will not have twenty years to transform their country. How can Japan catch up in the future?
There are many cultural exchanges between Japanese and Chinese young people, for recently our government decided to let our young people visit China.

*Only after Nixon went to Peking. So you can see who decides!*  
Yes, that is Hirohito and the Japanese ruling class: they have no real power at all.

*They take their final orders from Washington.*  
That's right. They always listen to the American voice and they cannot decide anything unless they visit Washington and get orders from there. So they are quite powerless. Their power is exercised over the Japanese people, but it originates in Washington.

*But won't all this clash with the interests of Peking in the long run?*  
Well, if the American government changes its policy toward China, the Japanese ruling class will follow. I am not very optimistic about the future. Take for instance what is happening in Korea. The Japanese government here, too, cannot move until they get orders from Washington or maybe from the CIA....

If the Socialist Party, the Communist Party, and several other parties could get together, and if they could obtain a majority, there might be some changes. But still, I don't know for sure. I think we must be very patient. I want to live until I am eighty years old or so. Therefore I am very careful about my health. That's my final conclusion.

*You are pessimistic about the future, but you want to reach eighty. In other words you do not want to miss doomsday?*  
I remain full of curiosity about everything concerning the human race, yes.
21. Victor L. Urquidi

Professor Victor L. Urquidi was born in Mexico in 1919. He studied economics at the London School of Economics and began his career as a research economist at the Central Bank of Mexico. From 1947 to 1949 he worked with the International Bank for Reconstruction and Development. In 1949 he entered the Mexican Ministry of Finance as an economist. From 1951 to 1952 he served with the United Nations Economic Commission for Latin America (ECLA). Since 1966 Professor Urquidi has been president of El Colegio de Méjico. He is a member of the inner circle of the Club of Rome. Among his publications are *Free Trade and Economic Integration in Latin America* and *The Challenge of Development in Latin America*.

You were associated with the Club of Rome almost from the very beginning?

I first heard about the Club of Rome in 1970 through a friend in the United Nations who was also a friend of Aurelio Peccei. The reason he asked me to study the background and find out what was being done was because he knew of my interest in projections, in problems arising from population growth, from the implications of science and technology for development. I have been associated with the United Nations on these topics and I had started some research in my own country on population growth, its consequences, and its relation to development prospects. After I read the background papers on the Club of Rome I became very interested because I was obviously aware that these were not purely national problems but international ones too. Shortly after that I was invited to join.

Could you give a rundown on how Mexico participates in the overall work?

We haven't yet set up a local group to systematically study the alternatives for the future of Mexico. I have participated in the Bariloche Foundation project, a Latin American model of the future. However, there are at the moment a number of people in Mexico in different disciplines who are looking into various methodologies and evaluating the results of the Limits to Growth model and other studies. We are also very hopeful of soon setting
up under my chairmanship a study group to develop a Mexican model for alternatives. The reason why we are getting involved is not just intellectual but also because in our government and in private sectors there is a growing concern over long-term issues. Mexico faces difficult problems because of very rapid population growth. We expect a doubling in twenty years. The demographers have not yet found any evidence of a decline in fertility even among the urban population such as has occurred in the past in many countries and is already happening, for example, in Brazil, or as happened in Chile and Costa Rica over the last ten years. We don't exactly know the reason for this but we associate it with the fact that our urban population largely migrated from the countryside in recent years. They have a very low educational level and are therefore not yet motivated in terms of modern culture to have small families, nor are they equipped to find out what can be done about it and take the necessary measures. The average education of a Mexican according to the 1970 census was less than three years of schooling. Fifty-seven percent our our labor force, according to the census, fifty-seven percent of these thirteen million people either had no schooling at all or had less than four years. This gives you an idea of the cultural difficulties of achieving a demographic transition. Meanwhile, mortality has declined from twenty five per thousand in 1940 to nine per thousand at the present time. It continues to fall, although at a less rapid rate than before.

This sort of problem makes us feel that in spite of the extraordinary social changes that have taken place in Mexico over the last fifty to sixty years, in spite of the fact that on the whole we have had progressive governments involved in deep social reforms or in accelerating development, we are still facing some extremely difficult problems - in connection with food supply, urban living, housing, and other aspects of an urban concentration; in the satisfaction of educational needs, and, more recently, even in employment. Because, although we had lived under the delusion that we did not have unemployment, recent data inform us that we have. In 1970 we had at least one million openly unemployed persons, and a degree of underemployment which is equivalent to at least another million. This means in total fifteen percent of the labor force. We are just beginning to feel at this moment the impact of a whole generation of new survivors from child mortality who are hitting the age at which you are either continuing school or you are looking for employment. We suspect, although we don't have enough data, that unemployment is particularly serious among the young age groups - people below the age of twenty, fifteen to twenty, and maybe even younger.

Until recently the general position of the government in Mexico was that we had achieved a fairly rapid rate of growth. After all, six and a half percent
over twenty years or more is very impressive. We believed until now that development itself was the answer to our problems and therefore would somehow provide for the needs of the rapidly growing population. Today, we have some second thoughts about this view. This has recently led the government to change its position on population policy from a no-policy attitude to a positive-policy attitude in terms of reducing the rate of growth by means of family planning.

*Madame Gandhi stressed to me that family planning is needed but that it should be on a voluntary basis.*

Well, because Mexico is a Catholic country and because of the position taken by the Church and the fanaticism that develops around these topics, the government is making it very clear that it remains very respectful of the individual decision taken by couples. However, what so far was not available was hard information. The government has started family planning programs through every part of the hospital system in the country, through social security, and through the national hospitals, and is finding an overwhelming demand for information. What the Mexican government wants to do is help people understand the issues in terms not only of their family situation but also in relation to national problems, and supply them with information that will enable people to make choices. If there is any sort of compulsory family planning it would fail; it would backlash immediately.

To go back to what I was saying earlier, we have begun to unfold a series of perspectives for Mexico which are not as hopeful as they were in the past, regarding not only the question of how to deal with a population doubling in twenty years; but also how to transform the economy to make it less dependent in terms of international relations, to intensify exports of manufactures and therefore to compete in world markets with other industrial countries and defend the prospects for our main exports, which are still basic products, and to develop tourism, which has been a tremendous help in our balance of payments. At the moment, in the medium term the balance of payments prospects for Mexico are extremely difficult and involve a necessary increase in foreign indebtedness which might eventually become a very heavy burden.

Because of a very close relationship between Mexico and the United States with, on the one hand, the obvious failures of American society, and, secondly, the restrictive economic policies that the United States is continuing toward Mexico and other nations, Mexico has to break out of this North-South relationship and is doing so under the present government. Mexico will have to seek its own way through ties with many different...
countries, not only in Latin America, but with the European Common Market, with countries in the Orient, with a view not only to selling our exports of basic products and manufactures, but also to attracting new forms of foreign investment in association with Mexican capital, or by attracting technology.

When Henry Kissinger became Secretary of State of the United States, his first act was to visit Mexico and to underline, he said, the importance the USA was to attach to the hemisphere. The New York Times merely commented that it sounded fine if it were really true.

You recall Nixon's famous speech on Latin America which really announced nothing new and gave rise to the so-called low-profile toward Latin America. I think that policy statement plus the enormous difficulties in securing the essential contributions to the Inter-American bank, which after all was a Latin American instrument of development, plus the frequent restrictive practices with regard to trade of the North American lobbies, which mobilize themselves to prevent the entry of Latin American products (this is very much felt by Mexico in terms of exports of vegetables and fish products and so on), all this has led to a complete disbelief in the intentions and in any positive policies on the part of the United States.

When President Echeverría visited the United States in 1972, he expressed a very critical attitude toward American policies, and toward the Organization of American States in terms of its utility and its capacity to handle the big issues, especially the economic issues. He was very forceful on the question of specific matters of cooperation between the United States and Mexico. Among them was the very sore point of a salinity deriving from the Colorado River which was literally destroying large areas of agricultural land in northwest Mexico. Our President said, ‘We are surprised that so much energy is shown and efforts are being made to reach agreements with enemies when nothing is done to solve problems between friends.’

There was an immediate reaction from the United States government with the result that within eighteen months this matter has found a very solid solution which satisfied Mexico to a large extent.

I met in Geneva with Ambassador Hernán Santa Cruz of Chile, who was chairman of the Algerian Conference Economic Committee. There are now plans to set up a development bank by the so-called Third World nations themselves. Well, as you know, we have a regional bank, an Inter-American bank in Latin America, and there are three subregional banks: the Central American, the Andean Corporation, and the Caribbean Development Bank.
**Financed entirely by Latin countries?**

They are financed by contributions from all the interested countries. In the case of the Inter-American Bank it includes the United States, which is of course the major contributor. It now also has contributions from Canada, from some European countries, and, recently, from Japan. But, after all, this is an operational institution. It has worked for more than ten years now. It has tremendous experience and it has access to the capital markets throughout the world. What is needed now is to reduce the dependence of the bank on the will of the United States, as expressed through the US Congress and its contribution to a special trust fund of the bank for the soft loans, and as expressed also in the voting power of the American executive director. Finally, there's an opportunity, because the two oil-rich countries of Latin America, Venezuela, and Equador, may be in a position with additional contributions, also from major Latin countries such as Argentina, Brazil, and Mexico, to contribute more capital to the Inter-American Bank, and thus earn more voting power.

*Progress breeds pressure for more progress. The basic goal, seen especially in Brazil, is to grow. Would you say that there is a realization in Mexico that economic growth has to be somehow slowed down?*

Well, this is a difficult question, because clearly in any country where the standard of living is still on an average quite low - in Mexico it is still about seven to eight hundred dollars per capita - with the obvious need to industrialize and to absorb people into employment, no government can fail to say that it must speed up economic growth. But the question that has come up clearly in Mexico in the last three or four years is that economic growth without a better distribution of income cannot be the objective of society. Also, through the work of our economists, it is becoming increasingly plain that a better income distribution will also lead to a better employment pattern. But what has been happening in Mexico is that we have developed a modern sector in agriculture which employs very few people and a modern sector in industry which through the indiscriminate use of labor-saving technology derived from the techniques developed in the industrial countries is producing commodities but not offering large-scale employment. Therefore, in terms of our political background, in terms of the Mexican revolution and its goals, and in terms of the policies followed at some stages during the last fifty years, we must place the emphasis on social and cultural objectives. All this makes it politically impossible to follow a pattern or a model of goals that does not simultaneously try to achieve what is generally called social justice. This means in effect the promotion of redistributive...
policies. A balance should be achieved in the participation of different social groups. If we are to follow a goal pattern which continues not only to encourage the rich, but that favors their economic position and with it the political pressure exercised through this preferential position of business groups in Mexico and then assume that somehow the rest of the economy will pull together and integrate into this system of privileges or into an open capitalist system; if it did that, then we will not be solving the basic problems of the country, which are still structural. The whole purpose of the Mexican revolution was to bring about social justice within a free society.

The Meadows study of limits to growth enjoyed great success in Mexico. It is being read widely, not only in Mexico but elsewhere in Latin America and in Spain. I think on the one hand it led many people to become aware of world problems in a way that had not been so graphically, so dramatically put to them before. On the other hand it has made many people understand that growth as such implies a structure of society which in the long run will not be socially just. Nobody in his right senses would suggest that Mexico stop growing. In fact, we would not suggest that the industrial countries should stop growing for the time being, because our own development is linked to their growth. But the idea is also getting around in Mexico that the patterns of growth should change, that the terms of consumption of the industrial, or postindustrial societies, are wasteful, that we in the modern sector of our societies are imitating that same pattern, and therefore that we are producing for ourselves the same kind of values that will arise from unnecessary consumption, from wasteful use of energy, from deterioration of the environment, especially the urban environment, and from many other aspects which have now been coming to light. As these ideas are developed and as these thoughts about the future crisis extend to broader sectors in the population, an awareness will be created which will lead to a reconsideration of much of what we are doing today in terms of waste. In effect, when the energy crisis developed late in 1973, the immediate reaction in Mexico was to say, this does not affect us, because we are more or less self-sufficient in fuels, from oil to gas. But it turns out that we are not, that we are requiring imports to meet about fifteen percent of our needs and that all of a sudden the cost of these imports has quadrupled. Therefore, we in Mexico must make efforts not only to be self-sufficient, but now we must be much more careful.

Some of the Africans I interviewed said it was too early to speak to students of ‘limits to growth’ in Africa at this point. Would talking to students in Mexico about these problems also be premature?

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about wasteful consumption of energy. I think, on the whole, that the idea that there are limits, that resources do not materialize overnight, that excessive population concentration can be harmful (as you can see for yourself in a city of the size of Mexico), and all this combined with tremendous inequality, tremendous poverty, and marginalization of the population, which increases social pressures, is not a healthy state for any country. If two years ago nobody heard about these problems, we can now say that after the dramatic presentation of Limits to Growth, even though people may not subscribe to what they call the fatalistic implications of the Meadows report, we will have these questions being asked continually and, at least, people admit that there is cause for grave concern.

The sort of natural reaction to all this is to say, ‘Things won't turn out as badly as a total collapse, because we are capable of seeking different solutions and the world should do something about it.’ Now, how and through what means, nobody knows exactly. But the idea is there. I think that among intellectuals and among people responsible for the government in Mexico, there is a very clear awareness not to be pessimistic or fatalistic. Because fatalism and pessimism imply that all we have to do is to accept the consequences of whatever will come from the development of modern industrial capitalism. Although in many respects we are a modern industrial capitalist society, we also have another side to our history and to our intellectual development which makes us feel that we are capable of doing something about it.

*I was impressed by what you said about the younger age group: the rise of unemployment, the young people who cannot study in the field they want to because the universities are too crowded, the faculties are full. This concerns the future of Mexico. What can be done? What should be done? How can one give them hope, or belief in the future? Otherwise they will be terribly frustrated.*

This is obviously a very very deep and important problem. After all, Mexico is a country of young people. Forty-six percent of our population is under the age of fifteen, with the expectation, from several studies, that this percentage will continue to rise through the end of the century because of a high birthrate and declining mortality of children and infants. The Mexican educational system differs from that of many other Latin American countries. It is not as highly developed as, for instance, that of Chile and Argentina and to some extent Costa Rica. But in the early twenties, after the revolution, the Mexican government made a really gigantic effort to develop basic education including rural education. However, in spite of these notable

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educational efforts, we still have about twenty-five percent illiteracy. As I told you, fifty-seven percent of our labor force has had less than four years of education. Therefore it remains functionally illiterate.

If you take the usual ratios of enrollment in schools by age groups, you find that whereas in urban centers the ratio is quite high - we perhaps don't have a hundred percent enrollment in primary schools, but we do have maybe sixty or seventy percent - in rural areas the rate is still extremely low. This is because children are not motivated enough to stay in school and because the government through its various channels is unable to provide the schools and teachers needed in small communities. It may surprise you to learn that our of Mexico's population of fifty-seven million, fifteen million, or over twenty-five percent, live in communities of less than a thousand people each. You can imagine what it is to provide schools on that scale to almost a third of the school-age population. With developments in primary education over the last fifteen years, we did not foresee in time their impact on secondary education. There has been a literal explosion in secondary education in the last six or eight years, with the government frantically building secondary schools, technical schools, high schools throughout the country. But what has happened is that the aspiration of people, of youngsters, is not to get into technical work, into trade schools, but to go for the general educational system. Because that gives them social status and leads to office jobs, where you dress differently, where you earn better salaries, where you are cleaner, where you are a white collar worker.

The impact of the universities is the same. The universities have traditionally been not only a place of learning and a place for acquiring certain skills, but have above all meant prestige. In this respect our university educational system is not different from that of the rest of Latin America. What is different in our educational system is the emphasis on general overall schooling, the uniform system of schooling in terms of national objectives and so on. What is not different as yet is our middle- and higher-educational system. Here, we haven't paid enough attention to all the diversity of purpose which an educational system can have, which after all is not to simply teach people history, some mathematical ability, and some scientific knowledge in order to put them through to the higher system, so as to produce lawyers, engineers, economists, accountants, and so on and so forth, while at the same time they will not have really integrated in the modern patterns of society at all. Again, we are aware of this, and one of the reforms that is going on in Mexico under the present government is in the educational system, starting from the primary schools, where new textbooks have been developed of a modern kind, textbooks that tend to make the
children aware of the world around them, of reality, of social interactions within the community and among the diversity of communities in Mexico. I know about this because I have participated in the preparation of some of the new textbooks. If they are successful it is going to cause a complete change in the mentality of children as they emerge from primary schools. They will be much more socially aware of the country's problems. They will have acquired knowledge not as something to learn out of books, but as something that is useful to them in understanding their daily life.

Going back to the universities, the universities in Mexico have barely been able to face the quantitative impact of the enrollment emerging from the secondary school system. They have been literally swamped, overwhelmed. With the additional circumstance that the allocation of funds from the country's federal budget, which is the main support of universities in Mexico, has been quite insufficient to cope with this avalanche. A large part of it has gone merely into construction of buildings, to provide classrooms. Very little has gone as yet into reinforcing the teaching staff and raising salaries, except in our national university. There aren't enough full-time posts for teachers. Most teachers are still part-time: they have jobs as engineers, doctors, lawyers, economists, and may go and teach a few hours a week. The size of classes has become gigantic. People don't know each other any more. It is a dehumanization of education. The libraries are so poor that they are hardly worth mentioning, except for some isolated institutes of research, both within the universities and a few outside, like my own, the Colegio de Mexico. Except for some schools or some particular courses, which indeed are of very great merit, the general quality of teaching has declined and the whole atmosphere of the universities has become deplorable in the sense that there are no good academic standards. There is very little discipline and we are faced with an intervention of politics in a narrow sense, in the sense that political sympathies often interfere with the grading of students and the standards applied by teachers. We see graduates emerging with degrees from the universities who are completely inadequate to deal with the kind of problems that they have to deal with in government or business or anywhere else. We always have of course an elite of students, the bright students, who in spite of the system make it and go on to postgraduate work in Mexico, the United States, Europe, or anywhere and come back and make up the elite, and capture the top posts. We have no difficulty in placing good university graduates. In fact, there is such a demand that they earn very high salaries in almost all the professions. But we are also producing a large quantity of mediocre and half-baked, poorly skilled individuals who cannot find a place in modern society - that is, in modern industrial activity - who

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are not good enough for research in government or anywhere else, who are frustrated, and who are unhappy about the whole situation. Behind these, you have those who do not manage to enter the universities because there is no place for them, youngsters of seventeen or eighteen who have not acquired a good enough middle education to enable them to get jobs or whose social aspirations are such that they will not accept low-paid jobs.

The Mexican writer Octavio Paz remarked a short while ago that ‘Latin America is becoming more and more a heap of ruined ideas and victims’ bones.’

Well, I think that if you look at the situation not only in Mexico, but even in Argentina or in many other countries - take for instance the disruptions that occurred in 1973 in Chile - you end up by being pessimistic. But it is not total pessimism, because there is a minority who will, as we say go, ‘contra viento y marea,’ against the wind and against the tides, ‘will come out on top.’ This will be the managerial and administrative elite of our countries and of Mexico. But will they be able to handle his uninformed mass of uneducated people who are pressing for participation but who do not have the training to hold the key jobs?

What should the advanced nations do? It sounds as if you could use twenty-five hundred young Americans who know Spanish and would come out to teach in Mexico.

No, this is utterly impossible. I think that what's happening in Mexico is that in spite of our lipservice to social reform, including educational reform, in spite of what we are doing, which I think is more important now than it was, say, eight years back, we are not as a society able to allocate enough resources to creating the necessary number of skilled individuals, or to create the necessary structures that will permit the individuals to be formed.

Is it a mere question of money?

Well, it is more than money. Naturally it is money too, because if there were more money for universities under the present government, they would certainly get it. But in the first place, we are short of skilled people. Therefore, we have to start by training them. However, it is still more than that. The emphasis in the last twenty years has been on economic growth, largely through government spending on the infrastructure; through foreign loans, spreading electricity, irrigation, road building, urban infrastructures, and so on. At the same time we have stimulated a policy of industrial enterprise largely through private individuals who received all kinds of

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incentives: protection from above, long-term financing, guarantees of foreign loans, and so forth. In order to promote the Mexican revolution and its consequences in the historical circumstances, in order to encourage the private sector to play its part, to run its risks, to invest its accumulated capital, there reigns a sort of informal understanding that taxation will remain light. Now, we cannot make a big dent in the social problems and in education without a tremendous expenditure which must be backed up by a proper tax system. The overall tax burden in Mexico, including every imaginable tax and even tollroad fees, does not exceed fourteen percent of the GNP. It is one of the lowest in the world by any standards, by whatever measure you use to compare tax burdens. Many articles were published about this situation in journals in the United States and Europe. This, to me, is a political problem and not a problem of technique. You can say, there is a lot of tax evasion. Well, so there is anywhere else. Whether there is more in Mexico no one can tell. If you use large computers, put everybody under a tax number, and pursue these things; if you could improve the administration so that it became perfectly honest, maybe you could collect a lot more taxes. Perhaps we could restructure certain taxes. But basically it is a political problem. As long as we have people in Mexico, and I include politicians, who are making and have always made their money on the side in various kinds of business deals, both honest and dishonest - I even include the middle class, which has accumulated land and property and thus made enormous capital gains, I include the professionals, who earn extremely high incomes - if all these people continue in a sense to hold the state to ransom, and reason, ‘If you don’t make it profitable for me, I cannot risk my resources, I cannot cooperate in the common good,’ then it will remain impossible to introduce a proper tax system. Until we do, we are not going to be able to handle the other problems. In that respect I am pessimistic. Look at my own work. I first started looking at tax problems back in the 1940's and I wrote in the 1950's about the need for tax reform in Mexico. In the 1960’s I participated in a high-level working group, in which we had the advice of Nicholas Kaldor, to reform the Mexican tax system. The same issues arose. By then we had, however, much better proposals to make. But I have not participated since, because I witnessed the same exercise only two years ago with the same frustrating results, so that amounts to twenty years of clear identification of the problem without any possibility of solving it.

Coming back to your original question, whether we could reallocate resources to social priorities; we should be able to provide, to train people for skills, and to equip libraries for the higher-educational system that a country like Mexico would need.

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I would almost conclude from listening to you that Mexico could use another revolution.

Well, yes. Exactly. I think we must be quite clear as to what the Mexican revolution meant. The Mexican revolution was an upheaval of a most anarchic kind, which cost over a million lives, which, of course, broke up the ruling system, but which led to ten years of chaos until fairly conservative forces within the revolution began to organize the country and put it together again. What we feel, looking back at what happened later, is that some of the more radical aspects of the Mexican revolution have become to some extent betrayed. We use a word in Spanish which is very hard to translate - ‘mediatizados.’ They have not become fully what they were intended to be. They have become something less, so that land reform, educational reform, social justice, the rights of workers, all this has not developed as some of the early aspirations seemed to indicate or as some of the intellectual participants of the revolution thought was necessary for the country. There's a book by Roger Hansen called The Politics of Mexican Development which deals extensively with this sort of question. Hensen blamed it all on the Mexicans themselves. I think there's one factor which he did not take sufficiently into account and which I think is very important, and has been long forgotten. An outside observer does not realize it anymore. Namely, to what extent the Mexican revolution and the new policies in the 1920's were threatened by outside interference, in fact, by the United States. Even to the extent that they obtained recognition for the republican government, Mexico had to make important concessions regarding petroleum legislation. There were times when the threat of armed intervention was very near. The second factor to realize is that during all that period of the 1920's and early thirties, whatever Mexico was trying to do to develop in any modern sense had to be done without foreign aid of any kind. Not only that, but capital even left the country. The feeling is very ingrained in Mexico that foreign pressure was such that many of the more radical objectives - and you can say this applies to the whole Cardenas administration, which expropriated the petroleum industry and pushed land reform to the limit - were gravely jeopardized all along by the need to sell commodities to world markets, mainly the United States, and by the need to have at least a nonhostile attitude on behalf of American capital. It was not until the Roosevelt Administration that, at least on a government-to-government basis, relations became civilized. So we suffered, and over a long period, as Chile suffered recently in a period of less than three years, tremendous foreign pressures which were brought to bear to prevent a national policy from being carried out in terms of objectives. Allende in Chile stuck to his

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guns. Mexican administrations throughout the twenties and thirties, with the exception of Cardenas, frankly compromised. Perhaps not totally, because there was no neglect of local legislation, education, and social services, but there has always been a demagogic strain in the statements of Mexican Presidents and their policies, a slightly populist approach. All this was done, but never to the point where it threatened the system. A balance was maintained, a very cleverly woven balance of interests, to the extent that the labor movement in Mexico was never strictly independent. It is still managed very much as a part of the establishment. In the face of foreign threats, however defined, you don't rock the boat!

This is the situation and it explains the peculiar form of the Mexican revolution that we have had, going from armed upheaval to a series of social reforms, while still using the word ‘revolutionary’ for what in many respects has been in reality a far from revolutionary development. This explains much of the unrest of the last few years. The crisis that built up in 1968, for example, was a manifestation of this. It was not strictly a student movement. All this has focused on the need for further changes, deep changes, for looking at basic issues. If you want to call this a new revolution, then in a European sense of the word it is a revolution. In Mexico you would not use the expression a new revolution, because in Mexico that would mean another violent upheaval, or to some it might even mean the implementation of a socialist system, like in Chile or in Cuba, which, I think, in Mexico would not receive widespread support.

22. Yochi Kaya

Professor Yochi Kaya was born May 18, 1934, in Sapporo, Japan. He was graduated in economics at the University of Tokyo in 1957. At present he lectures on systems controls at the same university and participates in the work of the Japanese team of the Club of Rome.
Among his books published in English are *Control Engineering* and *Adaptive Control Procedures*.

*How many Club of Rome teams are working in Japan?*

Only one. We have one team with four different projects.

*What do the four projects mainly consist of?*

Our four projects are principally concerned with the future of the planet and its relation to Japan. The first project is concerned with problems of resources, energy resources, such as iron, copper, and aluminum. As you know, there have been many kinds of projects related to these problems. However, most of them were concerned with specific items, for example, energy problems by themselves, or iron shortages or aluminum shortages separately. We are undertaking a vast research project on all energy problems simultaneously. We study them as a unit, as a system. We started this project in 1972, and several specialists are working on it alone. Among other things, we compile a review of all known research concerning the mineral and energy resources. When this is completed, we will make a model showing the relationships among prices, the supply and demand. The researchers concentrate on what will be the future supply of mineral and energy resources. They undertook one other important project: determination of the climatic effects of heat and carbon dioxide. As you know, researchers in Japan have been studying these problems by the use of simulation methods. This is, of course, a problem concerning geology and meteorology. For example, a simulation model was made which could present the behavior of the average earth temperature in relation to the carbon dioxide content and the heat expelled in the air. These models are still incomplete and we are at present improving them. We discovered some faults in the model developed in the past and then made an entirely new simulation model for this kind of problem.

Our second project is related to the international division of labor. I think we are dealing here with a very important problem. This project might be called a kind of world-model project. We constructed a world model quite different from the Meadows model in the initial *Limits to Growth* study. We divided the planet into nine regions, each of which has six sectors: agriculture, mining, light industry, heavy industry, manufacturing, and services.

*Willem Oltmans, On Growth Two*
General services.

Yes. We did not construct a simulation model, but a kind of planning model. In other words, we set a target for the future world. This target was expressed mathematically in a criterion function. By utilizing the mathematical programming method such as quadratic programming and others, we were able to minimize the criterion function. The objective of this project is the following: We have global constraints concerning resources and environment. Of course, these problems are related to population questions and economic development. Nevertheless, what is more important for us at the moment is how to establish industries in the developing countries. Because, as you are aware, they will be unable to develop their full economic activity without outside help, as from Japan. In this case, we encountered difficult problems. Almost all developed countries are industrialized countries. Their main exports consist of industrial products. Therefore, if developing countries would want to export their industrial goods, they could not do so to both developing and developed nations.

Except for Japan, because you don't have relatively cheap labor.

In the past this was true. But now the situation has very much changed. Moreover, in the future we will meet many, many problems of global constraints. For example, energy supplies are hardly adequate anymore and will be scarce in the 1980's or 1990's. The price of energy resources will rise considerably. Maybe even four times or more. This price rise may have a deep and negative impact on the development of developing countries. What we will have to do is to find a way, now, to establish industries in developing countries, even if these kinds of constraints will prevail. I think that a most important method is to depress industry in industrialized countries.

What do you mean by depress: reduce?

I would like to explain the situation in greater detail. What we have to do is find a way to narrow the gap existing between the developed and developing countries. Perhaps the most important aspect of this question is to be able to change the industrial patterns in the developed nations.

That seems to be the big question: How to do this in what Kenneth Boulding once called ‘the cowboy economy of the United States’; to make it a ‘spaceship-earth economy.’

It should, anyway, result in the leveling up of industry in the developing lands. I will give a hint of what's perhaps a workable solution. Compare the

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total arable land of the United States with, for example, that of Asia. Used arable
land per person in Asia is about 0.34 hectares, while that of the United States is about
2.1. This is almost six times that of Asia. Almost all arable land in Asia is already
cultivated. In Asia, the ratio of all cultivated land to total arable land, is about 0.8 or
about eighty percent, and therefore very high. In the United States only fifty percent,
or about one hectare per person, is still unused. Moreover, the productivity in the
United States per hectare is much higher than in Asia. The GNP per capita in the
United States is the highest in the world. If the Americans could export only for the
development of other countries and if they would export more agricultural goods to
other parts of the world, this could bring a solution. In that case, they would have to
reduce their GNP. Of course, we have to discuss many aspects of the problem. If we
want to develop heavy industry in Asia, we encounter a series of difficulties. Income
level and tradition are two such problems. Income is low, which keeps educational
levels low. This means that even if there is room for the development of heavy
industry, it is almost impossible -

- to train people.

Exactly. In this respect we will have to give developing nations more time.

Abdelkader Chanderli, president of the National Algerian Gas Company, complained
in my interview with him that some of the industrial nations monopolize technological
know-how, to the disadvantage of the developing nations.

Transfer of technology or knowledge from the developed to the developing nations
is perhaps one of key problems linked to the economic development of the developing
nations. We have to take the procedure of the development, timewise, of the
developing nations very much into account. These problems are immense. Our team
is attacking them, basically, by using the method of mathematical programming.

The third project we have undertaken is to seek the possible and desirable behavior
of the Japanese economy, subject to various international situations such as constraints
of oil and/or other mineral resources. The methodology is again utilization of the
quadratic programming method, and the results show that the fragility of the Japan
economy is mainly because of the high import ratio of energy.

The fourth project is the study of the Japanese value system. The researchers in
the project are constructing a model or models representing
the relation of the Japanese industrial structure to the value system of the Japanese people.

Are you using for this model behavioral scientists, social scientists, psychologists?

Yes. Two of our members of the team are systems scientists. Two are social scientists, including an economist. We don't have social psychologists, at least, not yet.

But would you not agree that psychologists hold the key to these problems?

I agree. But we couldn't find a suitable candidate for the job.

What is the difference of your team's approach from that of Forrester and Meadows?

We do quite different work. For instance, take the second project. The main objective in itself is quite different. Meadows intended to show, with his team, what might be the result of global constraints. They thought that the world might meet with various crises during the coming century and they tried to show what might be the results. What we in Japan are trying to show is what kind of industrial pattern, worldwide or in Japan, might be the best, taking into account these coming global constraints as well as the redistribution of income. Also, it should be kept in mind that the results of this study differ entirely in various corners of the world. The basic difference from the Meadows team is the objective. We feel that the most important goal is to discover how to distribute our material resources so that developing countries may develop more. This is one point. The second point is that our model is neither a simulation nor a second prediction model, but a planning model. We establish an objective and try to find the solution that optimizes the criterion functions. What we are primarily looking for is not to try to see what will be, but to see what has to be done to change the future.

To influence it?

That's right. Our attitude toward these global problems is quite different and the methodology itself is also quite different from the ForresterMeadows approach.

Why is the basic approach of the Japanese Club of Rome team so different from what was done at MIT?

I remember a talk given about three years ago at MIT. I was there to attend
the congress arranged by the Club of Rome in which we discussed what kind of project we should undertake. At that time Professor Jay W. Forrester showed us the prototype world-model. At that time I already considered it too global. There were, for instance, no regional perimeters. Of course, there are global constraints concerned with resources, environment, and land. All these are quite serious, that is true. But I feel that even more serious and important is the problem of the distribution of material affluence. In India, for instance, the GNP per capita is under one hundred US dollars, which represents about one or two percent of the per capita income in the United States.

What you mean is, How does one design models that take in these differences?

Correct. The people of India are not restricted by global constraints, but by regional constraints, by the smallness of the land allotted to the individual farmer and so forth. Global constraints are no doubt quite serious, but we have to look at their effects on the regional way of life and the regional economic development. I relayed these views to professors Forrester and Meadows and recommended to them that they divide the model at least into two parts, into developed and underdeveloped nations. But, unfortunately, they did not follow this course. This, in my view, is a very basic point. The other point that I would like to make is that what we are doing here in Japan is not to say, ‘Well, the world is heading for doom,’ or be guided by negative thinking, but to say what we can do.

In practical terms.

That is right. I am an engineer, so my way of life is not to become alarmed, but to be active and constructive. This, then, is the basic reason why we undertook the Club of Rome projects.
23. Masahiko Aoki

Professor Masahiko Aoki was born in 1938 in Nagoya, Japan. In 1962 he was graduated in economics from the University of Tokyo. In 1967 he obtained a PhD in economics at the University of Minnesota. He lectured at Stanford (1967-1968), at Harvard (1968-1971), and at present he is an associate professor at the Institute of Economics at Kyoto University. He has published several books of which *An Economic Theory of Planning and Organizations* drew international attention. This interview was conducted at his office in Kyoto.

You were once a radical student. Then you went to the United States. Since you joined the faculty of Kyoto, how do you see yourself now? As a member of the Establishment?

Well, I am a defiant professor, if you like to call it that. But, seriously, my political and scientific view has been developing in terms of the intellectual influences and important events I have been exposed to. But I consider it possible to view my activities and thoughts as coherent, not in the strict sense, but more loosely. I was very active in the student movement some fifteen years ago. If I were a student today in Thailand or Indonesia I would do the same.¹ If I were a student today in Japan, I might be engaged in different activities, community movement, for instance.

What made you a defiant student in the past?

We revolted those days because we felt students should be more self-reliant and independent. That is how the radical student movement arose. But we soon discovered that within the left-wing movement, too, there was an authoritarian structure; the Communist Party dominated the student movement. Our group therefore revolted against the Communists as well, because the party was under the influence of Moscow at that time and it changed its policy each time Moscow changed its policy. Yesterday they were against the atomic bomb and today they are for it. They criticized US atomic explosions and they supported Soviet tests. For various reasons we had a big clash with Communist leaders; the first fistfight in the Communist

¹ Willem Oltmans, *On Growth Two*
Party headquarters occurred in those days. As a result, I was expelled from the party. We began organizing another radical organization, independent from the Moscow or any other party line. At the time we were reasonably successful and toppled the government.

After the peak of the student movement in 1960, students started to fight each other, like the sectarian quarrels of the past. A feeling of defeatism prevailed among students. I felt that mistakes of the past were repeating themselves among us. I considered our organization only a tool of a movement, not an objective in itself. After the movement itself subdued, we had a meeting of student leaders in my apartment. A few of my friends and I refused to continue these sectarian quarrels. I was accused of fleeing the battlefield. This was quite a shameful thing for a Japanese to be accused of, but I took it as a compliment, as I wanted to be a self-reliant man rather than a conformist. So I quit the movement. I am still rather proud of this decision. I think it was they who were the cowards. I wanted to settle down to think about what was wrong with Marxism, I mean, orthodox Marxism distorted by its self-proclaimed successors. I still harbor great respect for Marx himself as one of the greatest thinkers of the nineteenth century. But I could not put up with the arrogance and lack of originality of Marxists, whether in power or underdogs. I tried to enter the Graduate School of the University of Tokyo in order to be master of my own time. But it took me two years to get in. The first year I was in jail and the next year I flunked in the oral examination.

You were known as a political agitator perhaps?

I don't know. Anyway, I finally entered the university. But I found it very hard to live in Japan. I don't mean materially, but spiritually. I wanted to develop my ideas freely. In Japan they like to put a label on people, classify people according to stereotypes. I wanted to detach myself from the past, so I went to the US and started as a student all over again.

Where?

I went to the University of Minnesota first. The reason was that a professor named Leonid Hurwicz was there. He inherited good ideas from the famous controversies among economists of the 1930's over the economic possibilities of socialism. He was studying decentralized, controlled economic systems using price mechanisms. As I had been dismayed by the inhumanity and inefficiency of overcentralization in Eastern socialist countries, his approach was very appealing to me. In Minnesota, I studied the question whether the economy could be decentralized even under the
presence of the so-called ‘spillover’ effects. Economists usually use the term ‘external effects,’ that is, effects of economic activities bypassing market mechanisms such as pollution and traffic congestion. That was also the theme of my doctoral dissertation. So I am not committed to the dichotomy of centralization versus decentralization anymore. There must be an optimal combination of the price mechanism and collective controls depending upon situations. Therefore, I am now interested in democratizing public action through citizen participation and so forth.

And after Minnesota?

In 1967 I began teaching at Stanford. This was an interesting period, since the student movement against the Vietnam war was in full swing. Also, the hippie movement was flourishing, especially in California. I guess the Beatniks tried to oppose a very individualistic way of life in its good sense of the word to the conformism molded by commercialism and the dominance of giant organizations. Looking back, you might say that the hippies made the approach upside down. That is, they experimented with a collective and communal way of living. Since we Japanese are chasing after Americans, thinking that theirs is the way to make progress, my encounter with countercultures in the US was very valuable and made me rediscover the value of our Eastern tradition of leading a human and serene life.

What are you relaying to your students at Kyoto these days, outside the economic field? Do you share your experiences in American communal life with them?

Oh, no! The so-called counterculture in Japan was imported from the US and is being made use of by commercialism. It is disgusting and phony. The same holds in the US too, except perhaps for the very beginning of the experiment. Now I enjoy building up a new framework of economics together with the students. This kind of attempt is being made everywhere, in the US, the UK, Hungary, and so on. We want to explore the possibility of economic arrangements that are more conducive to the creative and conscious development of individuals. For that purpose, my whole experience in the past is very useful.

Are at least some professors on your faculty on your side?

Not really. Ironically, this is one of the reasons that Marxism is still very, very influential. But it has become a rigid doctrine here. Most professors who adhere to Marxism lost the true spirit of Marx. They are nothing more than interpreters of Das Kapital, like medieval priests interpreting the Bible,
and are very authoritarian in their relations to students. You can inherit the spirit of Marx without being a Marxist. One has to be innovative and creative and study present conditions.

*In your studies are you using a model like Forrester and Meadows used in their study of ‘limits to growth’?*

Although some of my friends are using the system of dynamic approach, I myself am not. I am interested in the interactive exchange between institutions and human motivations and it is very difficult, if not impossible, to incorporate this within systems having a dynamic framework of the Forrester type.

*Do you feel that the rise of materialism is affecting the Japanese people?*

Very, very much. I am a little sad about this. Take Kyoto itself. Not long ago, Kyoto was a very beautiful place, as it had been for centuries. Not only our temples were beautiful, but houses, too, were attractive until ten years ago or thereabouts. As a result of the new material abundance, they are tearing down the old structures and constructing apartment buildings using plastics. The older houses were built by hand of wood and paper and beautiful tiles. Now, plastic tiles and plastic boards are used and the entire city becomes depersonalized, dehumanized. Kyoto is losing its character and charm. Perhaps we still have some beautiful classic temples, but there is no real life around them. Life in Kyoto becomes a replica of Tokyo.

*But does the rise of materialism affect the culture, the soul, the hearts of the youths themselves?*

Materialism is mainly pursued by people in their forties, or perhaps their late thirties, the people who were brought up or spent their youth in poverty or misery, in wartime or in the days following World War Two. I myself remember times when it was difficult to get food. My parents experienced hard times and had to go to the countryside to get food for us. Rice was much too expensive to buy at that time. These experiences deeply affected people. So, when Japan finally entered an economic boom, these were the people who wanted their own house, refrigerator, car, and so forth. Of course, they have to be responsible for their families. But it all seems a little too much. The younger generation now has mixed feelings about it all. Some are very materialistic, but there are also youngsters who are not enthused by all this abundance, since they were brought up with it. They are the ones who are now seeking different values. They are becoming interested in Oriental Philosophy again, in Buddhism, in traditional culture, like teen-agers and the young in their early twenties everywhere in the affluent world. But I...
cannot have hundred percent confidence in them, either. They take material abundance for granted. I wonder if they would be strong enough to withstand a food crisis, for example. I hope so.

*Gunnar Myrdal lambasted the Club of Rome study by Forrester and Meadows as 'nonsense.'*

I have a lot of sympathy for the MIT report.

*On 'limits to growth.'*

Yes. After all, it has become quite obvious that there are very serious limits to growth. We cannot go on forever the way we have been treating our planet so far. Of course, it is the big corporations and multinational firms who want to grow and grow, because the hierarchical structure of these commercial giants demands continuous expansion. Their management is built around constant expansion, how to enlarge their activities and profits. Their main function is making plans for new products and new outlets. If they were to stop growing, their management would become like generals in times of peace: they would turn into static symbols.

*And the managers have to satisfy the shareholders.*

Yes. Growth has to satisfy the motivation of the men involved in corporate activities, like the shareholders and even middle management. If a firm expands, and the top management functions are restricted to planning alone, another kind of administrative job will be delegated to the middle management. Or to the workers. Workers should receive higher and higher wages, and if a corporation or firm grows, increased income turns into a symbol of integration. Therefore, companies are motivated to grow and grow. You can clearly see that if we keep our economic institutions as they are, the economy will tend to continue to grow in spite of an increasing abuse of resources, pollution, dangers to the environment, and so forth. It is a myth of neoclassical economics to say that consumers always direct the way in which the economy turns, and that the economy grows because consumers want to save in order to be able to spend more in their later years than in the present. I do not think this is true. The corporations shape and mold our lives.

*How does one determine the wishes of the consumer?*

The consumers adapt themselves to their environment. If you cannot have a healthy environment in the cities, then you tend to buy it by making a trip abroad somewhere. Or you live in the suburbs or buy a piece of land somewhere away from the metropolis rather than make a personal contribu-
tion toward turning the city into a livable place again. So city life continues to deteriorate. The basic problem, however, is how to control corporate activities by giving more power to the people. I am very much interested in community controls, giving more power to communities and regional government. For instance, if a corporation were not allowed to build new factories without reaching an agreement with the local people, I believe the pollution problem would be mitigated a bit.

The old left tends to think in terms of the classic power relationship between capital, management, and workers. However, I am prepared to believe that some of our labor unionists tend to favor their own interests against the rest of the members of a community.

When the now-world-famous pollution of Minamata Bay took place by mercurial emission of the Chisso factory, it was disclosed that the labor unionists were on the side of the company against fishermen dying from mercury poisoning. Unbelievable!

Of course, I am on the side of underprivileged workers in their struggle against low wages, poor working conditions, and so forth. But when an issue becomes a public matter, in a highly developed country like Japan, the old class-struggle scheme does not tell the whole story. I would rather support community action covering all kinds of less advantaged people. I am not against economic growth as such. But growth should contribute to the improvement of the standards of less advantaged people; less advantaged because of factors beyond their own control such as health, age, or sex. Japan is too much centralized; it is still a very bureaucratic country. Two-thirds of our taxes are still collected by the central government; one-third by local governments, while in reality, two-thirds of our public expenditures are spent by local governments and only one-third by the central government. That means, the way it is, that one-third of the funds are transferred from the central government to local governments. But, with this system of transfers, the central government exerts very strong control over how the money is to be used. All transferred money is specified in detail, and categorized. Everything comes to local governments not in straight grants, but as categorized subsidies. This means that the local governments do not have that much say or power. Usually, the interests of the central government or those of a wider area are imposed upon local people.

For instance, in our prefecture of Kyoto, the governor has been in power for almost twenty years. He was backed by the Communist Party as well as by the Socialist Party. He was an ex-professor of Kyoto University, in-
cidentally. He did not maintain very good relations with the central government. Therefore, he could not get enough funds from the central government, which was a blessing in disguise, since now we don't have that many superhighways in Kyoto.

I propose that after the central government collects the taxes, they should redistribute these public funds to local governments without any ties, so that the local governments are free to use the funds as they see fit. If this kind of pluralist approach were taken, I think it would contribute considerably to the welfare of local people. Individual citizens could participate in choosing the kind of community they would want to live in. At least they could exert pressure on their local leaders and thus be heard. The key to all this is to decentralize our central power. I feel that the same of principle should be applied to international relationships.

_But the world is more than ever before in history a single unit. Local decisions affect the fate of all of mankind more than ever before. Look at the decision by Arabs to manipulate their oil to their own purposes and advantages._

I do not think that any big power should have the right to control the petroleum of the Middle East. It is the Arabs who live there. They are justified in controlling the supply of petroleum according to their own interests, and other powers should respect this inherent right. Our relationship with the People's Republic of China in this respect is an interesting one. China insisted on the principle of nonseparation of economic issues from political issues. Our businessmen seem to accept this principle at least on the surface. I feel Japanese businessmen should accept the same principle in dealing with the Arabs, the East Asian countries, or anyone else. But most of them still behave arrogantly, especially toward East Asia.

_B.F. Skinner seems to be impressed with how the Chinese are programming their society._

Is that so? I have seldom been in agreement with him when it comes to prescriptions for social ailments. He seems to me too manipulative. But, of course, I am profoundly interested in the development of Chinese society. They are trying to build an agriculture-based society, subduing industry to agriculture. In the context of an environmental crisis created by over-industrialization, I think China represents the most interesting social experiment in this century. We Japanese are driving in fancy private cars equipped with stereo, but we cannot afford good _sashimi_ anymore.
How do you see future relations between the Chinese and the Japanese? While youths in China are presently being brainwashed by the hundreds of millions into accepting Stalinist and Marxist philosophies, Japanese youths wear jeans and are being flooded by American rock ‘culture.’

I do not know. I admit that the Chinese product is rather monolithic. But the Chinese are not only Stalinists; they also inherit the traditions of the Chinese classics. For instance, if you read the famous book by Mao on dialectics, you may be amazed by its parallel with the *I Ching*. Japanese youths will not be as monolithically oriented as their Chinese neighbors; this is not possible nor is it desirable. But at the same time, we should respect the moral commitment of our Chinese contemporaries, which was miserably lost among us while we were keeping ourselves busy pursuing material abundance.

Eindnoten:

1 Professor Aoki was referring to the Thai student uprising in 1973 that lead to the toppling of the military authoritarian regime, and to the 1974 student riots in Jakarta against Japanese economic imperialism, as well as the corrupt practices by the regime of General Suharto and his cohorts.

24. Raghavan N. Iyer

Professor Raghaven N. Iyer was born March 10, 1930, in India. He studied economics at the University of Bombay. In 1950 he entered Oxford University as a Rhodes scholar in political science, economics, and philosophy and obtained a doctorate in philosophy. After returning to India he worked with the Indian Institute of World Culture and served as chief research officer to the head of the planning commission of the Indian government. In 1956 he returned to Oxford and taught political philosophy for eight years, after which he became visiting
professor at the universities of Oslo, Norway, Accra, Ghana, and Chicago. In the United States, he lectured at the Rand Corporation, Harvard, Bowdoin, the University of California (Berkeley), and UCLA. Professor Iyer is president of the Institute of World Culture and a member of the Club of Rome. He now lives permanently in Santa Barbara, California. His publications include The Moral and Political Thought of Mahatma Gandhi, The Glass Curtain Between Asia and Europe, and The Future is Tomorrow.

What are your impressions of the Club of Rome symposium here in Tokyo?

The club has made considerable headway in its meeting here in Japan. Members have been forced to see beyond the psychology of doom. I think the club is groping toward a more positive philosophy.

After the ‘limits to growth’ message?

Yes. A positive formulation could truly inspire large numbers of people. As you heard me say at the meeting, I am of the opinion, like Herzen, that we do not change events in the world by rational demonstrations or by syllogisms, but rather by ‘dreaming the dreams of men.’ The Club of Rome is still caught up too much in the false glamor of the social sciences, what Bernard Shaw called ‘the new barbarians,’ mesmerized by systems analysis, computer techniques, and so on. They still seem to possess tremendous faith in the sovereignty of these techniques. In the long run this will not be enough. I have been stressing that we should go beyond our concern with the Limits to Growth; we should study the Limits of Waste and the Limits of Wants. This would be constructive and could catch the imagination of people. As Pythagoras said many centuries ago, unless we have a sense of limit in the mathematical and philosophical sense, we will not be able to maximize our possibilities. Limits are not exactly limitations. Unfortunately, when most people talk about Limits to Growth, they speak the language of limitations. It is my view that although we have to confront scarcity, the emphasis on Hobbesian survival is very inadequate.

We also have to seize on the idea of ontological plenty in spiritual goods and creative potentials. We know from brain research that human beings use only a minute fraction of their total potential of brain power. There is an enormous wastage in the human brain itself, in the human machine. This situation cannot be met without a conceptual breakthrough.

As long as human beings are merely creatures of habit, imitative and

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adaptive, they will always be caught up in an obsession with scarcity, with necessity, with impossibility. They will tend to run around in circles. And what often looks like a new truth about the world is nothing but the precipitation of Karma. A man for whom everything has gone wrong in his individual life and who has to face the cumulative consequences of his past errors may create a theory of the universe which is only a compensation for his acute sense of futility. Something like this is happening to groups, to experts, to societies. They are painfully confronting the Nemesis, the Götterdämmerung, the psychological burden of accumulated Karma. Yet, they want to turn their predicament into a theory about the world. Now, this is understandable, and also somewhat poignant. It is something that any compassionate human being would try to understand sympathetically.

However, many young people today are intuitively aware of the noetic, the creative potential which cannot be measured in terms that belong to the logic of the excluded middle, or to the language of mechanistic systems. They do not have the concepts as yet; they function intuitively, and are not ready to formulate what they feel. The big problem is for those who are well aware of the intellectual history of the world and who are not afraid of anything, who are truly original thinkers, to provide the concepts that can help to underpin the intuitions of large numbers of young people everywhere.

*When you work with students in California, being an Indian yourself, do you feel that such a formula, which embraces the intuitive feelings of the young, could encompass all youths, also those in developing lands?*

Yes, indeed. The disinherited, the psychologically underprivileged in California have a spontaneous capacity to identify with the uprooted and the dispossessed everywhere. At the same time, they have a Yankee ingenuity in problem solving that could teach much to the alienated young all over the world, and especially in developing countries. Unfortunately, the young Americans who travel abroad in search of thrills are not representative of the finer spirits and the tougher types here. The pseudohippies abroad obscure the deeper import of what is happening here.

*I realize you consider all this talk about the Third World a lot of nonsense.*

I think many of the representatives of the so-called Third World are still partly paralyzed by obsolete categories, in terms of statistical indices of GNP. However, behind all this there exists an awareness that they do constitute the majority of mankind and that they must also have the right and the effective possibility to create their own new cultural patterns. I especially

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found this in our professors here from Nigeria. These feelings are very strong and perhaps at times even stronger in the African than in the Asian. The Asian, through a long period of intellectual enslavement, has been deceptively successful in Europeanization. The African, on the other hand, in his efforts to Europeanize, has had to create such an abyss between himself and the great mass of the people that his innate sense of dignity and self-respect forces him now to ask more fundamental questions. If one asks where in thirty years from now will be the real excitement about ideas, about creating a new society, this will take place in what I call the First World - Afro-Asia and Latin America.

I also think that these events will be profoundly affected on the one hand by what is now happening in China, and on the other hand by what takes place in India. These are the two opposite poles. The critical influence on this process could be Japan. The Japanese have now reached the crucial stage where, of course, they do not any longer belong to the First World - in your jargon, the Third World - since they are now in the forefront of the developed nations. At the same time, they are very much aware that they differ profoundly from the people in the United States and Western Europe. Many Japanese would like to swing in one direction or the other, while some worry whether this will lead them into developing a schizoid personality, on the one hand hanging on to the rituals of their old world, while at the same time embracing the rituals of modernization. In other words, in Japan the problem is one of rituals and forms versus a more fundamental regeneration or renaissance. And even a Japanese renaissance must borrow, it must be eclectic, it must be somewhat wild at the same time, be willing to take risks, and to invent an entire world of new ideas.

This is where it seems to me that the old thought-patterns of Europe, especially in political philosophy, have come to a stop. These ideologies are no longer relevant. Unfortunately, a lot of people outside of Europe, in the Afro-Asian world, are likewise limited by these inherited ideological categories. Initially they tried to develop Arab-socialism, Indonesian-socialism, Indian-socialism, but all these efforts turned into clichés and hollow phrases because people did not really know how to find authentic political formulations in relation to the tremendous needs of self-definition. This is what I feel is happening in Japan now, and which will interact with what is happening in China and eventually with what happens in India.

My own impression is that India will eventually be affected by the explosive events both in China and Japan.

For India, the most critical development involves the rethinking of
Mahatma Gandhi's ideas. Gandhi said that after his death India would totally bypass and betray his ideas, but that thirty years later India would have to come back to them out of pure necessity. This is now beginning to happen, and the trend will accelerate.

One could draw a parallel with the Indian national movement. It was only because the liberals failed, while the terrorists also were not succeeding, that out of necessity the elite - the intellectual - turned to Gandhi, who alone could appeal to the masses. I feel that India will be confronted with a similar situation in regard to its social and economic structure. When India eventually discovers that it cannot conceivably do what Japan has done without harnessing its traditional values and providing new motivations, when India finds out of necessity that it has only played with the symbols of Gandhi, it will be forced to ask much more fundamental questions. Then, I think, the real revolution will take place. No doubt, this can have a strong radical base. It can also borrow from other movements and, indeed, it would not be possible now to predict what form the changes will take, but it will begin in the realm of looking again seriously at what could be called the basic questions that Gandhi raised. These come down to one central Tolstoyan question: How much land does a man need? Or, how much of the goods of the world does a human being need to have a meaningful and fulfilling way of life?

*Which brings us to John Platt, member of the Club of Rome and a behaviorist.*

I concluded from my private conversations with Platt that he is an interesting example of a man who, although trained as a behavioral psychologist, seems to be very much aware of new spiritual cults and trends. He mentioned his interest in why some three thousand young people would turn up in Michigan to attend a talk on meditation.

*The influence of the East.*

I discussed with Professor Platt how these symptoms seem to connect with something very old in America itself, the idea of the American nomad, rootless and homeless, who is constantly required to defend himself. There is, no doubt, an authentic pulse behind the American dream, which has nothing to do with the system and which is at work today. Americans, for all their limitations, are unique in history. They possess perhaps the closest connection between theory and practice. An American's theory might not be very good at times. His practices might be wild, but he does take ideas.
seriously. To him, ideas have legs. So, if an idea strikes him, he immediately wants to try it out.

And, as you know very well, in Europe, and of course, for a long time among the Brahmans in India, people merely flirt with ideas. This can become almost a kind of autoeroticism. People indulge in ideas without any reference to changing one's actual patterns of conduct. The close interaction between theory and practice in America, on the contrary, is very, very important as a dimension of the contemporary revolution among the young.

Now, what is this contemporary revolution? I have thought about it a great deal. I think it is a revolution neither in institutions, nor in human nature. I do not see dramatic changes in human nature. This is a subtler revolution. It concerns the very relations between man and his institutions, as well as the more primary relations between human beings. There is a groping toward role flexibility, rule skepticism, and unconditionally in mutual acceptance.

Take the cruelty and absurdity of universities. The moment comes for every student when he has to draw himself apart or conform. Of course, there is a third way, where one learns to handle the grading system for what it is worth and not let it bother him really. The young are discovering how to relate to each other in ways independent of fixed roles. This entire new attitude, a critical distance toward institutions, is psychologically very important.

The Club of Rome consists mostly of older persons, who have great faith in institutionalization. This is the legacy of the aftermath of World War Two, the search for a megalopolis, some form of world government. This faith in institutionalization is a serious mistake. I do not think that the present revolution is going to express itself in new institutions. In fact, if it should express itself prematurely in institutions, it will be aborted and subverted. What is involved is really a revolution in ways of doing things, and these do not always require formalization. To understand this philosophically, we have to give more weight to the informal logic of human communication - all those things that we imply in conversation, with our eyes and gestures, for instance, and which cannot wholly be contained in the true-false dichotomy.

Or be fed into computers. But, returning to this revolution. Where does the deeper involvement of the mind come into all this? Margaret Mead spoke of the seventies as the decade of the brain. As long as no one knows how our brain really works, what to do with the some three billion new arrivals
within the next thirty years? I mean aside from dropping the present grading systems.

Indeed. We have perhaps accumulated over the past fifty years more facts about the human brain than in all recorded history, yet, we do not have a new theory. We are still caught up in seventeenth-century concepts. Young people are pioneering, in California and all over America and Canada, in new modes of creativity, of heightened awareness. They engage seriously in meditation, are experimenting by making mistakes, but learning the power of thought, of creative imagination, called *kriyashakti* in the Indian tradition.

What the youth of America is presently doing is very relevant to the secret of Japan's success as well as to the future of all of Asia. The more I reflect on what is happening in Japan, the more I realize that the Japanese have not merely imitated American modes of living and working. The Japanese have always possessed a certain gift in creating images, and are particularly skillful in creating images that release the will. No doubt, many Japanese do not do this self-consciously. They also are caught up in illusions. The critical question arises, Which people will emerge in Asia or elsewhere in the world who will exemplify a very high level of self-consciousness? What this means, intellectually, is the capacity to inhabit simultaneously many different metaphysical perspectives. As Immanuel Kant once intimated in an essay on the future of metaphysics, there could be as many metaphysical frameworks as there are states of mind, even though this conception does not fit into the rest of Kantian philosophy.

I believe that the man of the future, the person of tomorrow, will be able to see the world as a Nietzschean, as a Freudian, as a Marxist, but in many other interpretations, through Zen, through Shankara, and so on. And if the man of the future is able to accommodate different perspectives, he will learn conceptual flexibility and those who actually engage in systematic meditation will be at an advantage. All the emphasis on the social sciences is still on adapting to change. There is no basis in modern behavioral work for understanding continuity. What is the thread of continuity in the life of a man from birth to death? It is here that the ancient East becomes profoundly relevant. Krishna said in the *Gita* that every man must meditate upon birth, death, sickness, decay, and error. For Plato man is not a philosopher, a true lover of wisdom, until he overcomes the fear of death. This is increasingly a paramount issue in the context of collective psychosis, the weakening of will, an issue that separates the living and the dead. The question will be more and more, Who can self-consciously recover continuity of consciousness amid the ever-escalating pace of change?

Willem Oltmans, *On Growth Two*
We see this problem most acutely in America, because of the prevailing fragmentation of consciousness, of the mass of sensory images. It becomes almost impossible to remember anything today or tomorrow. Even morality makes little sense, because one does not know anymore what one promised one day or a week later. All this forces people to look for more fundamental solutions to recover a continuity of consciousness. I have the impression that out of sheer necessity these matters are being pioneered in America. But in time, this activity will and must interact with the untapped spiritual wealth in India, Japan, China, and elsewhere. We are going to find some very surprising changes.

*This could have a vital influence in bringing the affluent world in true communication with the peoples of Asia, Africa, and Latin America.*

A very great influence indeed. It would also mean that men would possess the capacity to identify the credibility of a human being who has mastered this new consciousness without reference to external signs and claims. There are still a lot of unconscious subtle traces in the human mind. We know today that because a man is an Indian, this does not mean to say that he is also rooted in the culture of India. If someone is Japanese, this does not necessarily mean he knows about Zen. We know this, yet there is the legacy of the old races in fostering subtle forms of racism, in compensatory messianism, looking for instant salvation, vicarious atonement. But these concepts are not being increasingly challenged, because a new kind of self-reliant human being is emerging. He does not want instant salvation. He does not want vicarious atonement. The new man is looking for the continuous thread, or what in the old books was called ‘the line of life’s meditation.’ I think that those individuals who can do this while still playing their part in society effectively will be the true pioneers of the society of tomorrow.

**Eindnoten:**

1 Karma = the law of moral retribution and ethical causation.
25. Alexander Yefremov

Professor Alexander Yefremov was born in the USSR in 1921. He studied at the Institute for Foreign Languages in Moscow. From 1960 to 1961 he was editor of the magazine Za Rubjezem (Across the Border). From 1961 to 1965 he was associated with the Soviet Organization for foreign journalists and later became a member of the Board of the Soviet Journalists’ Association. Since 1972 he has been secretary of the school responsible for the education of functionaries of the National Workers Union. Professor Yefremov is also chairman of the Council for Public Information, a subsidiary of the Soviet Peace Council. He has published several books, which include Behind the Curtain of Limited Wars and Europe and Nuclear Arms.

How does the Soviet Union interpret the word ‘détente?’

By ‘détente’ we mean, of course, the easing of international tensions so as to reduce the possibility of a military confrontation. This is the most important part. In addition, we mean the development of the widest possible cooperation in the political, economic, scientific-technical, and cultural fields. A détente cannot be limited to the termination of any military confrontation or a weakening of this confrontation. In order to be complete and lasting as well as irrevocable, such a relaxation must go hand in hand with an improvement in the atmosphere of confidence among states and nations. This is why we are of the opinion that a strengthening of this cooperation must be the main basis of détente. Experience gained during the last few years shows that groups who hold this opinion are more successful than those who maintain that it is necessary to begin with a military relaxation first. Experience shows that purely military peace without sufficient political preparation and without creating an atmosphere of trust cannot be a solid basis for détente. We have already witnessed some cases of unilateral reductions in armed forces by some parties, but political conflicts always continued, after which tensions quickly reappeared, while expenditures on arms and military equipment was increased again. This experience alone shows how important it is to create such conditions as to
exclude the possibility of escalating military conflicts, escalating a tension which may lead to the use of violence in relations between states. That is why we attach great value to creating certain principles among states, such as the recognition of existing frontiers, the exclusion of the use of violence, or the threat of violence among states, as well as mutually beneficial cooperation and many other principles which are already reflected in agreements and treaties that have been arrived at between this country, the United States, France, the German Federal Republic, and a number of other countries. If these principles are not looked upon as scraps of paper, as mere empty words, but as a solid penetration into the psychology, not only of the states concerned, but of all nations, we may hold the opinion that a genuine relaxation will be guaranteed.

As to what we thought when the United States announced a military state of alarm [in October, 1973, after hostilities broke out in the Middle East] or an increased state of readiness of US military forces including nuclear weapons, I will tell you this. At the time I was present at the World Peace Congress in Moscow and I spoke to many colleagues, particularly from European countries, because I was working in the European Committee for Security, attended by some 400 representatives, mainly from European countries. There were also many representatives from Latin America, Africa, and Asia. When we exchanged opinions concerning this American action, the impression was gained that everyone was highly alarmed as a result of this situation. It goes without saying that such action is not in accordance with a general relaxation or détente. But there is also something else. This is my personal opinion and I have not yet come across this view in the official press, but I can share my opinion with you. Personally, I believe that this action by the American government was related in many ways to the internal situation in the United States, particularly to the Watergate affair. This is my conviction. During this period, when the position of President Nixon was extremely complicated, he felt the need of turning public attention from a complicated situation, and in so doing, to divert attention from widespread criticism addressed to him. Particularly during those days people were considering what had to be done about the tapes and so on. Everyone knows about this. Taking this into account, I personally was not very alarmed. But the fact is, of course, that a situation could develop which would be different from whatever some government had in mind when announcing a state of alarm. In such conditions, it should be remembered that factors will start operating which may sometimes have an effect contrary to the original intention and the will of the government involved. A very dangerous situation might arise which might unexpectedly result in a con-
Professor Norbert Wiener once wrote that there can be no progress when information is not available. The opinion in the West is that a détente would have to mean more exchanges at cultural levels and, particularly, at formative levels. This means not only sending the Bolshoi to the West but, for instance, allowing the publicity media to circulate freely. When I am in Moscow, it is impossible for me to obtain non-Communist foreign newspapers such as the New York Times, Le Monde, or the Nieuwe Rotterdamse Courant.

An active cultural exchange is an extremely important factor for détente and for improving general cooperation among states. In this respect, the Soviet public is completely in favor of the widest possible development of cultural cooperation among the largest possible groups among populations; among scientists, painters, authors, poets, and so forth. I think you and I are optimistic in this respect and that our opinion is that the situation will develop in a way which corresponds with the interest of peace. However, we have certain doubts in this respect and I believe that these doubts should be understood in the West. In this country certain traditions were formed in the education of our young people and the education of our society. And, naturally, people in this country watch with apprehension at the possible arrival of outside propaganda in our society, which would lower the moral
level of our population. We do not wish this to happen. We know particularly well
the danger of the drug mania which we can at present observe in many nations, of
many varieties of gangsterism, and of whims among the young which could lead, if
introduced here, to highly undesirable consequences for our society. We are also
against the dissemination of pornography, which is abundantly available in some
places. In this respect we have formed our own traditions. When we speak of a
guarantee in respect of a full exchange of information with the West, or when we
approach the remaining questions from this point of view - taking the problem as a
whole - I think that we will find a solution which will be in the interest of humanism
and that of a further development of our civilization.

You recently established an office for copyrights in Moscow which may bring us a
step nearer to the exchange of publications.

The manager of this new office is an old friend of mine, Boris Pankin. He used to
be a journalist, like me. I have discussed these matters with him, and I think that the
establishment of a new agency for copyrights in the Soviet Union will promote the
exchange of literature between our countries and the West. Undoubtedly, this will
bring some order to possible claims on either side and, in addition, it will assist in
informing each other concerning new publications in the West and in the Soviet
Union. I think that in this way much can be achieved. The public here attaches great
value to the setting up of this office.

Last year a book of mine was published, called *Europe and Nuclear Weapons*. It
was published in Moscow. But I have already received a copy published by the
American government in Washington, D.C. It contains the complete text of some
400 pages. The book was reproduced by means of Xeroxes. The fact that we have
no copyright agreements apparently makes it impossible for my book to be published
in the West the normal way. Therefore, this is now being done in a semiclandestine
way, if I may call it that. It seems to me that it could also be very important that
opinions of our scientists be published on a larger scale in the West so that we may
understand each other better.

*Just as there, reigns confusion in our part of the world as to what the Soviet Union
believes détente means, there are also many interpretations in regard to what your
country and your government consider ‘concrete peaceful coexistence.’*

Undoubtedly. We believe that in every society there is always a certain struggle
going on between various groups and various classes - the history
of mankind shows that such a struggle always went on - and that this struggle will undoubtedly exist in the future. By peaceful coexistence we mean that there are two kinds of states, each with its different social structure. In the one system - that of the capitalist states - there is private ownership of the means of production and in the other system - the socialist one - the communal ownership of the means of production is given priority. This is the main difference between the two systems. We are of the opinion that peaceful coexistence should mean that every country and each of these two systems will develop further and that the future will show which structure offers the best prospects, or which structure will be victorious, particularly as a result of such peaceful competition. When we recall the writings of Lenin on this point, we see that he said we should set an example through our economic policies and by our economic achievements. Most of our attention is devoted to this aim in order to ensure a higher standard of living and a greater satisfaction of the cultural and spiritual needs of our citizens. And, if we achieve greater successes in this respect - and we are convinced of these successes - this will, in our opinion, have a corresponding effect on states that still have a capitalist structure. It is no coincidence that if you look at Latin American nations or those in Africa and Asia, and the way in which they are developing, you see that they, too, are now trying everywhere to achieve state ownership of the means of production. This shows that in doing so more stable conditions for the development of the economy are created, so that economic crises will be avoided.

We think that peaceful coexistence particularly should mean that each system should have the opportunity to develop in whichever way it wants to and to show the way in which it can achieve these earlier-mentioned goals: a higher standard of living for all the population and the fulfillment of all its needs. This is what we mean by peaceful coexistence: each system is to have its own development, a development along various lines, but without ever forcing other parties to adopt the same ideas. We are against the export of revolution as we are against the export of counterrevolution.

And there is another matter to be raised on the subject of international relaxation within the framework of peaceful coexistence. For such a coexistence is only possible through means of a general relaxation. But this relaxation, let me repeat, must not only be accompanied by a weakening of military confrontation, but simultaneously by a development of the widest possible useful collaboration on either side in the fields of economy, science, technology, and culture.

*On the subject of relaxation of tensions, the Secretary-General of NATO*,

Willem Oltmans, *On Growth Two*
my respected compatriot and former Minister of Foreign Affairs, Mr. Luns, stressed this difference in the concept of ‘peaceful coexistence’ between our different parts of the world in the course of an interview with the American magazine Newsweek in 1972. He indicated that while the Soviet Union talks of peace, it was, in fact, only interested in war. This, then, is the opinion of the highest NATO official. Would Mr. Luns, then, be merely a purveyor of fairy tales?

The opinions of Mr. Luns concerning détente are nothing new. I remember his predecessor, Maulio Brosio, saying the same things on the eve of his departure as Secretary-General. In my book European Security and the NATO, I have elaborated on this question. I have paid attention to the statements by Brosio, who has described the myth of this Soviet threat in some detail. This myth has continuously played an important part in the history of NATO as a major dogma which has opened the possibility of realizing certain ideas of NATO. In my opinion, lessons of history are very instructive. It appears to me that whenever there was any question of any reduction in the arms race, it was always accompanied by a revival of the myth of threats by the Soviet Union. At the end of the first stage of the Cold War - I mean, at the end of the unfavorable developments in the beginning of the fifties - when there was some discussion concerning the possibility that the Soviet Union might attack Europe any day, I remember a statement in January, 1951, made by General Lauris Norstad that the question would not be whether there would be any war but in which month of the year 1951 the war would start. The point of view of the Supreme Commander of NATO thus was made crystal clear. And we are remember the statement by Thomas K. Finletter, the former Secretary of the United States Air Force, who also once began a book, Power and Politics, in a similar vein. He wrote that the day was near when the Russians would have sufficient bombs and planes available to start a sudden attack on the United States which was to destroy cities and the greater part of American industry. Naturally, the incorrectness of such statements was later recognized. In April, 1959, Marshall Montgomery, Deputy Commander in chief of the NATO forces, admitted that Russia had no intention of attacking the West, but this was only said at a very late stage. In the meantime, the military expenditure of NATO rose during the years 1949 to 1954 from 18.7 billion dollars to 56.3 billion. This meant that in the course of five years it was raised more than three times. The second time we saw that the myth concerning a threat to the world by the East was again spread on a wide scale during the beginning of the sixties. We remember, for instance, the NATO Council in Oslo in 1961, when rumors concerning preparations for a Communist attack were circulated. A call was
then made for a new round in the arms race. Then, in the sixties, we saw again that NATO expenditures rose by 10 billion dollars, which was again followed by Robert McNamara's admission that there had been no justification for this arms race since the date concerning Soviet military programs, which had formed the basis of the continuation of the arms race, had been completely incorrect, and the Soviet Union had not drawn up any part of such a gigantic military program. The whole affair had been a deliberate falsification. When we now look at the arguments used by Luns on this question we naturally no longer find such direct statements to the effect that the Soviet Union is about to play the part of a wolf attacking the West European Little Red Ridinghood. Naturally, nobody would write like this anymore, for it would be too naïve. The allegation of a Russian threat is now being made in a more disguised form by saying that the Soviet Union aims at creating a situation in which the Soviet sphere of influence will be able to spread gradually over Western Europe. The argument used by the British war office is particularly interesting. According to a theory raised by Mr. Peter Blaker, the Soviet Union does not want to develop normal relations with the capitalist countries as the Soviet Union would not want to put up with the existence of a Western society, as it sees no prospects for an economic war with the West. This assumption then leads to the conclusion that the Soviet Union is attaching greater importance to the use of violence and so the threat of the Soviet Union consists particularly in this use of violence. This in turn means that imaginary intentions are ascribed to the Soviet Union, in that the Soviet Union is supposedly building up a colossal military potential. I would like for the West to approach such statements more objectively, for in spite of the lessons of the past, when data concerning military programs of the Soviet Union was falsified, these kinds of falsifications go even further. Let us recall, for instance, that President John F. Kennedy, when he came to the White House, had the data handed out by NATO checked. This data alleged that the Soviet Union had far more people under arms than NATO, that is to say, some 175 to 200 divisions. When these figures had been checked, Secretary of Defense McNamara informed Kennedy that the number of divisions was only half as large. Recently, we have again been hearing talk of enormous Soviet military programs, of a gigantic arms race, and so on. As compared to the usual standard of misrepresentations, these are most inventive fairy tales. It is now said, for instance, that the military expenditures of the Soviet Union - the figures were published by the London Institute for Strategic Studies, among others - amounted to 77 billion dollars for the year 1972. Therefore, these were supposed to be even higher than military expenditures by the United
States, although it was known that America spent 79 billion on military purposes during 1972. The Soviet Union spent 17.9 billion roubles, in accordance with its budget. The interesting part is that the falsification of these figures is even to be found in military reports in the Western press. For instance, I recently looked through the Military Review in connection with an article I was preparing. This expert magazine stated as its immediate conclusion that military budgets of NATO countries are twenty percent higher than those of the Warsaw Pact countries and that the number of NATO divisions was higher than that of the USSR and its allies. You can see that statements alleging that the Soviet Union has a far larger military potential, and therefore constitutes a threat to the safety of the West, and that it is using the policy of relaxation to arm itself in the meantime, are even at times proven to be absurd and not to correspond with the actual facts in the military circles of some Western countries. Naturally, I understand Luns' intention, for he wishes to maintain at all costs the continuing increases in armaments expenditures. Here I must once more point out that after General Andrew J. Goodpaster, commander in chief of the NATO forces, had stated in 1970 that there was a massive Soviet power buildup in Europe, and after he had urged for a renewal of the armament race, military expenditures immediately went up. In 1971, military expenditures by European NATO countries rose by 1.3 billion dollars. In 1972 they rose by another 5.4 billion compared to the previous year. From these figures it is evident that this strong rise in military expenditures is coupled with the propaganda campaign concerning Soviet military threats. On this point we can say, of course, that every authority may say what it likes. But we should always consider the facts, and they are quite clear. That the Soviet Union aims at a true relaxation is evident, not only from the official statements by the Soviet government, but also from concrete steps: concluding treaties on the restriction in the use of strategic nuclear weapons; the proposal which was made in Vienna at the Disarmament Conference in the course of the negotiations concerning disarmament; the proposal to reduce military expenditures by ten percent on the part of the countries that are permanent members of the Security Council; and many other proposals aimed at military relaxation. As far as stories concerning the Soviet threats are concerned, history confirmed a long time ago that these are propaganda cover-ups for the continuation of the arms race. I believe that we should aim very soberly and patiently, very realistically and quietly, at successful negotiations concerning military relaxation and a development of mutual cooperation. By doing so, the influence of this myth on the public at large will be weakened.

Willem Oltmans, On Growth Two
Circles in the West claim that Moscow has no bona fide intentions in the disarmament negotiations, for your country refuses, for instance, to receive the former Secretary-General of NATO, Manlio Brosio, as a special envoy to discuss these matters. As a scientist, can you give me a personal opinion?

I will give you my personal opinion. I think that every government, when it is asked to talk to someone who has practically always expressed his doubts concerning the Soviet Union as regards the détente, who has always accused the other party of some unwillingness to start genuinely peaceful coexistence, and who has always been behind the arms race in order to try to continue this endless spiral of armaments; the selection of such a person as a representative of the entire Atlantic bloc in itself quite rightly raises doubts as to the sincerity of the mission and as to its chances of success. This is one side of the problem, which is connected with Brosio's personality. But I believe that there is another factor here, which is that we also had in mind the position of a number of other European states; that is to say that a discussion of the problems in connection with a reduction of forces should not be the sole prerogative of the existing blocs. About fifteen European states belong neither to NATO nor to the Warsaw Pact countries, so any discussions behind their backs would raise certain objections on the part of these countries which, in our opinion, might worsen the general atmosphere of the discussions. In my opinion, these two reasons are sufficiently convincing.

Taking into account the energy crisis, as well as the general economic problems of the world, don't you believe that disarmament should have priority over anything else in order to prevent mankind from wasting over 200 billion dollars a year on weapons of destruction?

Undoubtedly, the energy crisis in the Western countries is forcing people to reflect on many things, particularly on the question as to how the future should develop. And naturally one of the first and main steps in overcoming this crisis is a discontinuation of the military confrontation - in reducing armaments - which would result in gigantic savings. We are sufficiently aware that military expenditures at present amount to over 200 billion dollars a year. Naturally, if these funds were spent on peaceful development, it would be possible to fully utilize the resources which are present on earth. In addition, it occurs to me that the main road leading to a liquidation of this crisis should first of all be disarmament, and this should be combined with a simultaneous and large-scale economic cooperation initiative between states, even if they have adopted the most opposing social systems. Returning once more to peaceful coexistence and relaxation, it seems to me that a successful achievement of coexistence and détente will be the most effective
guarantee for liquidating the results of the energy crisis and will also prevent a further deterioration of this crisis.

As you know, the MIT study Limits to Growth, has attracted attention in Western countries and others. Is there also concern in Soviet scientific circles over growth, population, regulation of natural resources, and how a more just distribution of the wealth might be achieved?

The question you raise is undoubtedly of tremendous importance for all countries, regardless of their social systems. Our scientists are thinking a great deal about it and much mutual consultation is taking place. If the solution of these problems cannot be realized in the immediate future, they will have very serious consequences, both of an ecological and demographic nature, and they may explode in some other more serious direction. But it appears to me that it is difficult at this moment to discuss a concrete solution. In any case, it is quite clear that it is necessary to organize an investigation of these problems in great detail and along very serious lines to which all scientists all over the world should contribute - scientists of the developing countries as well as of the socialist and capitalist countries - so that these problems can be judged concretely and fully so as to enable them to be submitted for further study in the United Nations. The problems should be tackled along a wide front. We naturally are not allowed to remain silent on these problems nor are we allowed to avoid them. Our scientists are prepared to make a great contribution in this field and personally I was very pleased that at the Congress of Peaceful Nations held in Moscow [1973] a special committee was doing serious work on our environment problems. Many interesting statements were made and our scientists are now looking closely at them so that they can be used in practical work done by our scientific institutes. I also think that these problems should afterward become the subject of a most profound and thorough analysis. Of course, our viewpoints vary concerning the way in which they should be solved, but it seems to us that if we are prepared to show sufficient goodwill and to carefully judge all factors involved, we will be able to find solutions which will ultimately satisfy all mankind.
26. Joseph Pajestka

Professor Pajestka was born on March 9, 1924, in Milowa, in Poland. He is an economist and a director of the Polish Planning Council. He has been connected with various organs of the United Nations in Uganda and at UN headquarters in New York. In 1960 he was an adviser to the government of Iraq. In 1962 he published Capital Investment, Employment and Economic Development and Studies on Development Patterns of Developing Countries. In 1970 he published, under the auspices of the United Nations, Social Dimensions of Development, with a foreword by the then Swedish Prime Minister, Tage Erlander. Professor Pajestka regularly attends meetings of the Club of Rome with his Polish colleague, Adam Schaff.

You have been actively following proceedings during this Club of Rome meeting in Tokyo. What are your impressions?

I came here with a rather superficial knowledge of the club. I was aware of the study, Limits to Growth, and I knew the kind of work that was being done at the Massachusetts Institute of Technology. In Poland, we have rather critical views toward the general position taken so far by the Club of Rome. Nevertheless, the book by Dennis L. Meadows and his collaborators was published in Warsaw and received wide attention. There were quite a few articles published in the Polish press commenting on the MIT report, as it is called.

Perhaps because I have been associated with problems of developing countries for quite some time, and with questions concerning resources, the environment, and so forth, I decided in an early stage to disagree with the MIT approach. If one argues from the point of view of the developing world, it would be accepted that the dominating ideology or the general ideologies in relation to economic and social progress maintain that these aspirations could be very well fulfilled. However, as the developing world stresses continuously, these are not solely problems of material welfare, but problems of human dignity.
Being guided by basic respect for one other.
That is right, basic human respect. One can draw the conclusion from Limits to Growth that there would be no chance for the developing nations to fulfill those aspirations or to achieve their aims by way of economic development. According to MIT, the natural limitations of the earth would not allow them to have the progress they need so badly. Our understanding in Poland of the situation, and I myself am fully associated with this position, is that this way of reasoning is totally wrong. In our view, societal relations and the institutional setup are responsible for the present deplorable world situation; it is by no means the natural elements that are causing this tragedy of division into rich and poor nations. It is not nature which is shortchanging us; it is people themselves who behave irrationally.

It is human behavior that will cause a catastrophe.
That is right.

This sounds like Skinner.
Some people might ask why we, Professor Adam Schaff and myself, from Poland, are attending this meeting and actively participate in it. We feel there is one valuable aspect of the work the Club of Rome is doing: they are seriously thinking of the future and are taking the long view. In the meantime, we think that the approach and argumentation of the club can be changed, and will then lead toward promoting greater rationality in human behavior. We feel we might have some influence here, and are pushing these arguments strongly during this conference. You know, I myself brought forward that the argumentation of Limits to Growth, as it stands, will cripple Japan or other highly industrialized nations if high rates of growth are not accompanied by setting firm goals for the growth of social purpose.

Historical experience proves that the drive for equality is one of the most powerful social stimuli. Man cannot become reconciled to growing inequalities in socioeconomic conditions which are the consequence of established structures, whether in respect to social groups, nations, or what have you, and which do not correspond to man's inner feelings of his own value and self-esteem. Consequently, it is clear that pressures for speedier progress, not only in the economic field, but toward a more rational behavior of man, will intensify.

The gap between rich and poor is, after all, primarily the result of historical circumstances.
Indeed, the dichotomy between the conditions of life and work of a man in
the leading industrialized countries and one in countries lagging behind in development is difficult to measure. The differences are not restricted to well-being - affluence on the one hand and poverty and hunger on the other. They also fundamentally affect the development of man's creative abilities, resulting in further increases in the disparity of living standards. Through education, radio, television, and other mass media, people are brought closer together and their appreciation of what is feasible and desirable is becoming more akin. This has consequences in man's behavior, and thus will be reflected in social and political relations. Individuals, as well as nations, are rediscovering contemporary civilization, merely to find soon afterward that they are its pariahs. At the same time, I should make clear that economic efficiency is an integral part and a dynamic feature of societies. It has nothing to do with the genetic feature of races or nations.

Now you are treading on the special territory of Christopher Jencks of Harvard.

The shared genetic heritage of the human race is the predominant element, and differences between individuals of the same race or nation are incomparably bigger than those between races or nations. Social experience available up to now offers ample proof of this. Statements to the contrary result either from prejudice or they are devoid of any empirical bases. Economic efficiency is a social feature. Practically speaking, a high degree of efficiency can be achieved by any society. This is not to say, however, that is can be done easily and rapidly.

Economic efficiency depends primarily on human qualities such as the capacity for rational action, energy, and innovative ability. Not only is the contribution of each individual of concern, but the way it expresses itself in the social structure, where it acquires a new dimension and different values, is also important. This is the starting point for the multitude of undertakings related to a development strategy. We then reach conclusions which help to understand the range and type of development undertakings and to formulate the objectives of a development policy.

There is a distinction between the economic and social objectives of development policy. Economic objectives are generally meant to include increases in growth rates through a rise in the production potential, for instance, by way of capital investment, the expansion of exports, and so on. Social aims include improved living standards for the masses, education, health care, and the like; increased employment opportunities, and a more equitable distribution of income and of social opportunities. It is often argued that these objectives compete with one another and that they are
mutually contradictory. Theory and practice are often based on the thesis that the implementation of social aims interferes with the achievement of a high rate of economic development.

Six years ago I attended a similar conference in Tokyo, dealing with futurology. Most experts, then, were projecting a ten percent growth rate until the end of the century. They were even calculating that the yearly income per head of the Japanese population would amount to thirty thousand dollars. But no one at the time was asking the question for what purpose such an increase in annual income was needed or desirable. The Club of Rome and *Limits to Growth*, on the contrary, are helping people today to ask these vital questions. They seem to realize that an ideology postulating annual increases of income is perhaps natural or correct in advanced nations, but at the same time they are looking for new ways of life, new horizons, new cultural and economic orientations that would be needed in the very rich countries, particularly in Japan.

One of the main reasons that I came to attend this conference was to study what the reactions of the Japanese, now, six years later, would be to these questions. What pertinent conclusions are the Japanese drawing from *Limits to Growth*? Are they going to curb the growth rate or will they continue to expand without setting any limits? Will they make efforts to control natural resources in much wider regions than Japan proper?

*A revival of Japanese imperialism?*

Well, not in the old sense, but perhaps economically speaking.

*Like exporting pollution or sending fishing fleets to empty Indonesian waters?*

What we are stressing during these discussions sponsored by the Club of Rome here in Tokyo is that the technical and practical instruments which have been developed with the help of the club and of MIT, the dynamic systems analysis and its projections as designed by Jay W. Forrester, should be intensively used in studying Third World problems. This indeed is a powerful technique. And perhaps it is not only a powerful instrument of study, it simultaneously has some genuine merits in demonstrating the consequences of the research. It can present analysts with different options. Frankly, my intention was to urge that this powerful scientific technique be reasonably used for the purpose of serving the urgent problems of the developing nations.

Even though we speak specifically of the problems of the Third World, it is my personal conviction that these are really the problems of all humanity.
We realize more than ever that the existing inequalities and injustices that ravage the Third World are in effect a threat to peace for all the world. Inequality and injustice are the root of the political friction now prevailing everywhere in these areas. To actively tackle these problems is therefore a matter of interest for everyone. It seems to me that the utilization of the new scientific tools that systems analysis is offering us is very promising and therefore it is worthwhile to cooperate with the Club of Rome, which is sponsoring and promoting these techniques in order to help increase its impact and influence. I think that most of the scientists and laymen who are taking part in our discussions here accept this point of view.

Aurelio Peccei and his collaborators seem to be sincere in their efforts to study the problems of future generations.

First of all, if there were no Peccei, there would be someone else. For, as the planet becomes smaller and smaller, man realizes more and more that our problems need to be tackled and solved on a planetary basis. Nevertheless, I am of the opinion that the Club of Rome is, psychologically speaking, absolutely sincere. I have had many discussions with Aurelio and other members. However, it is also true that the position of an individual, even when he is sincere, is largely determined by his social milieu, by his social position. Through this environment he gathers his ideology. I am not saying this to propose changing the structure of the membership of the Club of Rome. Peccei does allow people of all orientations to enter the inner circle. But perhaps the club should be open to an even wider range of opinions if it is to have an impact on an even wider scale. If not, it could disappear from sight in a very short time. If it seeks a wider platform and becomes more efficient, the club will not die.
27. Aklilu Lemma

Professor Aklilu Lemma was born September 18, 1932, in Jijiga, Ethiopia. He studied biology at the University College in Addis Ababa and went to the United States where he continued his studies at Northwestern University. He was graduated in zoology from the University of Wisconsin, Madison. In 1964 he obtained his doctorate at the School of Hygiene and Public Health of Johns Hopkins University and that year he joined the Medical Faculty of the Haile Selassie I University in Addis Ababa and lectured on parasitology. From 1966 to 1970 he was dean of the Faculty of Science and Director of the Institute of Pathobiology at the same university. Professor Lemma was a visiting scientist at the Stanford Research Institute, lectured the Harvard School of Public Health, and completed research work at the University of California. He is chairman of the Ethiopian National Scientific and Technical Research Advisory Committee and executive director of the Ethiopian Science Foundation at Addis Ababa. Professor Lemma also founded the International Centre for Insect Physiology and Endocrinology at Nairobi, Kenya, in 1969. He is a member of the Club of Rome.

What attracted you to the idea of the Club of Rome?

I knew Dr. Aurelio Peccei from a meeting of the International Institute for Environmental Affairs, of which we are both board members. He told me about the Club of Rome in 1970 in Paris.

After your association with this organization for some three years, what is your evaluation?

I have mixed feelings. I am still forming my opinion. At first glance, the Club of Rome is a committee of people from mostly developed nations. They have so far been mainly looking at what the prospects of the future could be from their own vantage point.
Business, finance, economy in general.
Yes, perhaps. And, along came the MIT study, *Limits to Growth*, which shook the world community, although it has hardly penetrated into Africa so far.

Why not?
I don't know. I think some of the African reaction was based on the view that *Limits to Growth* mainly dealt with the future problems of the developed world and it simply was not their business. On the other hand, some Africans I have talked to who did read the book expressed genuine interest. There was lively concern about what the MIT group is trying to teach us. I am not an economist. I am not a politician. I am a simple biologist. But even as a biologist, I am intrigued by the methodology used to relate human survival to human needs through studies of resource depletion, population explosion, limits of energy, and so on. Such a study shows the genuine interest of the Club of Rome in humanity at large, the world as a whole. They have now constructed a first world-model, feeding information of all types into the computer and receiving answers which predict the situation twenty, thirty, forty years from now. My own interest and possible contribution to the work of the Club of Rome is to interest African economists and computer experts to see if we can use these systems dynamics models to predict the future of less-developed countries in the world.

For instance, I would like to see some studies on what the factors are that are causing the widening gap between the developed and the developing worlds.

What are some of the major causes of this constantly aggravating situation? We must study, in the light of our findings, what could be done to remedy the causes of this gap.

The accent of the MIT study and most or all models of this kind seems to be on technology, economics, and finance. But what about the psychological, the human factor?

This is very true. On the whole, the human factor has been neglected in *Limits to Growth*. The biological adaptability of humans under various constraints has not been considered. For instance, we are getting used to and even depending on many material things, such as oil and energy derived from oil, which we did not have a hundred years ago and which some parts of the world such as rural Ethiopia still do not have. Many parts of Ethiopia and other similar countries have hardly used any source of energy apart from locally available material such as wood, cow manure, oxen for farming,
donkeys for transport, and so on. Over eighty percent of the Ethiopian people have never used oil as fuel. These people cannot miss what they have never had. The energy crisis, as we see it today, is really a problem for those who are dependent upon it. 

Another factor which has been bothering me for some time is the following. Take a developing nation, like my own. We want to set up some industries, and the developed countries assist us. They sell us, let us say, machinery based on the use of modern energy, oil or a byproduct fuel. Those who sell us the modern machinery are well aware that in thirty years or so the kind of energy that makes the machines run will not be available anymore. On top of this, between now and the time that we will all be running out of oil, the price is increasing rapidly. It will skyrocket, even. Afterward, what happens? And this is not all.

The prices will go up. Therefore, whatever we produce in the future will be a lot more expensive. The rise in prices will accelerate even further. 

What happens after the energy is used up? The developed nations possess the know-how. They have the machinery and so on. They will most likely develop alternate sources of energy. But this in turn will demand higher levels of sophisticated technology, which most of the developing nations do not have and cannot build, either, in the relatively short period of time that we have ahead of us. Therefore, what is going to happen is that we are going to remain underdeveloped in the future, too.

In my view, this is fundamentally wrong and unjust. And to return to the human factor and humanity as a whole, these aspects have not been deliberated upon and given the attention they deserve. Mostly, the MIT study has discussed how we can keep our comfortable lives; how we can continue to drive our big automobiles and so on, instead of considering how to resolve problems of the poor and improve conditions for all of humanity, in order to survive.

All humanity, you mean, in rich and poor countries alike.

Indeed. This is my belief.

Do you discuss these matters with your students? Are the young people in Ethiopia delving into these questions?

I am afraid I cannot really give you a satisfactory answer. Somehow, we do not seem as yet to look beyond the immediate future. We in the developing nations could learn from the approach of the Club of Rome to look at the long-range future. This is a very positive contribution of the Club of Rome to the Third World. We have not been able as yet to look fifty, or a hundred
years into the future. In our part of the world, people are still starving; they are hungry for elementary education; more than ninety percent cannot even read or write. The farmers are often too poor to buy the ploughs upon which they depend. The people demand more education. They want elementary improvements. The emphasis in these areas of the world should be on developing the masses rather than training an elite to enable them to look into the distant future at sophisticated levels!

As far as the so-called population growth problem is concerned, we have had no major complications in this respect in Ethiopia. As a matter of fact, most of the developing nations in Africa have hardly reached a point of concern about overpopulation, because we have vast underpopulated areas. Take the Sudan. Its land mass is equivalent to the entire area of Europe, while its population amounts to only about twenty-five million. We not only have vast lands in Africa, but we also have abundant natural resources. So at this point we are not worried about this.

The principle question we are faced with in most of Africa is how to assist in developing rural communities; how to help raise the standard of living and teach people to improve not only themselves, but their methods of farming. In Ethiopia we have, for example, initiated a better educational system geared mainly toward rural development.

You mean the present Ethiopian regime initiated this program on behalf of the peasants?  

Yes, under constant pressure from within and from abroad. Instead of increasing the number of our big universities, we have begun a program to educate as many people as possible up to the sixth grade. We teach them how to farm, how to improve their livestock, what tools to use for ploughing, how to construct plumbing, and so on. After these courses they return to their villages. The majority of the population can become self-reliant, while a small minority of brilliant students will continue into higher education. Perhaps this explains why, in a country like Ethiopia, we think of the basic needs of the population rather, than on the level of the Club of Rome and others, who worry about being able to continue to live in luxury.

Eindnoten:

1 This interview was conducted in 1974, prior to the revolutionary developments in Ethiopia leading to an overthrow of the feudal ruling class by the military, and initiating land reform programs for the peasantry.
28. Helio Jaguaribe

Professor Helio Jaguaribe was born in 1923 in Rio de Janeiro. He was graduated in law from the Pontifical Catholic University of Rio de Janeiro. Since then, he has specialized in political science with an emphasis on sociopolitical developments in Brazil and Latin America. Professor Jaguaribe has lectured at Harvard, Stanford, MIT, and El Colegio de Méjico. He presently holds a chair at the University Institute in Rio de Janeiro. He is a member of the Club of Rome. Among his major works are *Economic and Political Development* and *Political Developments*.

*Today, we find less freedom and democracy in South America than in 1961, when President Kennedy presented his famous Alliance for Progress plan for South America in Punta del Este.*

Yes, basically this is true. But initially, developments in Latin America were only marginally affected by US politics. Ultimately, it was internal factors that had their consequences. External factors played their part and created favorable, and in some cases unfavorable conditions, but I think it is important for observers of the area to acknowledge that developments have been essentially determined by internal factors.

Why has Latin America become less democratic over the last few years? I think the answer is connected with the crisis of a typical Latin American experiment of the late forties and fifties: populism. Populism, as looked upon under Latin American conditions, is an alliance of classes which discovered that they had more interests in common than conflicts. Those classes were, roughly, the new industrial bourgeoisie, emerging from the recent process of Latin American industrialization, plus the technical sectors of the middle class, plus the organized sectors of the working class. Opposed to them were some of the merchant bourgeoisie, which in another context are called the *comprador* bourgeoisie - the traditional sectors of the middle class - and, the lumpenproletariat, to a limited extent.

These great divisions of social groupings, during the late forties and the fifties, were such that the prevailing force was the one represented by the

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Willem Oltmans, *On Growth Two*
group under the leadership of the new industrialists, the new bourgeoisie, which was led, for objective reasons, to have a sort of loose alliance with the working class. The consequence of it all has been what we call Latin American populism.

This populism was a very unstable, unstructured, and ideologically ambiguous system. It was actually based on the fact that development was providing enough room for the bourgeoisie to give a compensation to the working class in such a way that all the members of this alliance had something to gain in the process of populist development. That process of development, however, was brought to a stop by the end of the fifties and, in some countries, by the middle of the sixties, as in the case of Brazil. Once the industrial bourgeoisie had no more surplus to distribute, the relationship of classes became classic, namely, a conflict between the have and have-nots. At that moment the populist system entered into crisis. The crisis of the populist system has brought about, in general, two propensities. On the one hand, the radical sectors of the populist cluster were led to attempt some sort of socialistic solutions which, as a rule, have failed. On the other hand, and against these socialistic tendencies, groups interested in restoring conservative values and interests were led to a fascistic proclivity - and as a rule have won. Latin American societies are today, with some few exceptions, governed by conservatives, who are technocratically oriented and interested in maximizing the importance of the private sector. At the same time they are also interested in relaunching the process of development, as far as this is compatible with the maintenance of their privileges.

I believe that an additional clarification concerning the social structure of Latin American societies should be introduced into this picture. Once again we are making generalizations, since it is easy to understand that there are countries and countries in that diversified region. Most Latin American societies, however, have a population consisting, predominantly or to a very large extent, of peasants. They vary, insofar as the peasant population is concerned, from countries with a relatively small peasantry, like Argentina or Chile, to countries with very large peasant sectors, like Peru or the Central American countries. Brazil, the largest Latin American country, is somewhat in a medium situation, combining a huge peasant population with a very broad and modern industry.

Argentina, with a per capita income above one thousand dollars, and a relatively small and well-off peasant population with a low demographic growth, about one and a half percent, is, in social terms, a well-balanced class society. In that sense it is not representative of the Latin American social structure. The typical Latin American society, say, Peru, is
characterized not only by a huge, very poor peasantry, but by a high demographic growth, around three percent per year and a heavy migration of poor peasants to the cities. There, however, they will not find the expected industrial jobs. For one thing, modern industry is increasingly laborsaving. For another, they are unskilled workers. So they join the marginal sector of the urban services. Marginality, therefore, is the main social characteristic of most Latin American societies. It is a marginality with two faces: the rural marginality of a peasantry living at the level of natural subsistence, and the urban marginality of the unskilled services, of the bootshining kind, also living at a strict subsistence level.

Once the process of populist development was brought to an end, these marginal sectors, although unorganized, start pressing toward some socialist solutions, calling for redistributive measures and a fairer socioeconomic participation. The Latin American upper sectors, in the frame of an informal but effective alliance between the bourgeoisie and the middle class - including the military - were confronted with the practical inevitability of the adoption of such measures, if the political process were to keep its democratic institutions. They were led, therefore, in defense of their privileges, to appeal to military regimes to contain the expectations of the masses.

China found one way of entering the nuclear age. India is still struggling to forge ahead by means centered around freedom and democracy. In Latin America, we have seen developments in Cuba in one corner of the continent, in Chile in the other. A People's Revolutionary Army is operating inside Argentina, and many other parts of Latin America are riddled with unrest, violence, and guerrilla warfare, often leading, as in the case of Brazil, to authoritarian rule. What further shocks do you anticipate before a measure of social justice will be achieved on your continent?

Two basic distinctions have to be introduced into the picture. The first concerns the difference between countries with a majority of citizens incorporated into their socioeconomic system, forming a kind of middle-class society, and countries with a majority of marginal populations, such as most of the Latin American ones. The second distinction concerns the time dimension.

Middle-class societies in Latin America tend to imitate European models of the welfare state. In the short run, that propensity is often still not acknowledged by several sectors - and here come the time dimension. The Argentinean young radicals, plotting a Trotskyite revolution for union workers who wish to achieve, with Juan Péron, a sort of Willy Brandt type of
social democracy, are as misled as, in their own way, are the Chilean military, who intend to establish a kind of Brazilian regime for a society where a majority of the population is integrated into the national system. In these middle-class societies violence predominantly results from mis-directed expectations from the extreme left and miscalculated fears from the extreme right. They will tend - although not automatically - to reach their balance with viable social-democratic institutions and procedures in the course of time.

For most Latin American countries, however, confronted with the problem of a huge rural and urban marginality and a defensive, minoritarian middle class, the situation is quite different. In such countries the present tendency is for military control, overtly or not, as the only possible way to preserve the status quo. Contrary to the former, in their case time tends to work against them. Except if they succeed - as the Peruvians do - in using the period of grace granted by the military interventions to successfully promote their own social development. Once again, consequences will not be automatic. Military dictatorships can last much longer than one supposes, note the case of Spain, and thus operate as a lengthy bridge between the dualistic societies of yesterday and their gradual expansion toward tomorrow's modernization. But it is very likely that, where social development is not actively promoted, the military regimes, in the long run, will not be able to contain the mounting pressures of the masses and of the increasingly dissatisfied sectors of their own middle class.

Mass revolutions, however, are historically rare phenomena and tend to become increasingly more difficult with the advance of technology. It should not be forgotten that the two last successful examples, Russia and China, have depended on the previous dismantling of the national armies, in lost wars, by foreign enemies. The internal splitting of the military, however, can produce an equivalent debilitation of the repressive capability of the armies and open the way toward mass revolutions.

Would you say that while the radical, the ‘angry,’ left, and the Communists, the orthodox left, in Latin America continue to fundamentally disagree on tactics, the rightists in Latin America are profiting from their quarrel?

The left tends to be more divisive, everywhere, than the right, because the left is mobilized by principles and the view of utopias, realizable or not, which imply distinct possible versions, whereas the right is mobilized by current interests, which have their own structure and a corresponding integrative effect. The divisions of the Latin American left - such as orthodox
Communist parties versus the revolutionary left - certainly do not tend to increase their strength. It should be said, however, that the major trouble of the Latin American left is not so much its internal division as the contradiction, in each of its main sections, between strategy and the prevailing conditions.

Let us examine briefly the Communist parties and the movements of the revolutionary left. As a rule, the Communist parties have the support - where they have got some political significance - of the unions. Their cadres include some middle-class intellectual activists and union leaders, who tend to be professionals. In fact, they are increasingly becoming a sort of Labor Party - if a bit more radical - and would be compatible if they would adjust their rhetoric and claims to their actual behavior and the ultimate expectations of the unionized workers, with a social democratic regime. By sticking to their rhetoric of revolution and often, although not always, opposing the moderate left, they weaken the democratic progressive movements and reinforce the strength and pretexts of the right.

Somehow the opposite happens with the revolutionary left. They claim to speak in the name and for the expectations of the working class. But they are young middle-class radicals, with practically no connections with the organized mass. They might be able, in most countries, if given enough freedom of action, to mobilize and organize enough contingents of the rural and urban marginal sectors to form a revolutionary army capable of confronting the official armies. But this is precisely what the official armies effectively prevent them from doing. So they remain a group of revolutionary officers without revolutionary soldiers. Incapable, in the present conditions, of promoting the revolution, they are limited to the practice of terrorism, particularly in less repressive and social-democratically inclined countries such as in Argentina. And so they contribute by their deeds - as the Communist Party contributes by its image - to the reinforcement of the pretexts and the strength of the right.

Brazil is now being compared with the gigantic economic rise of Japan after World War Two. Your exports jumped in 1973 by 53 percent to 6.2 billion dollars. You are sending sophisticated computers to Japan. Last year, Brazil recorded the largest percentage of economic growth in the world, 11.4 percent. But what is happening to the much-needed agriculture or to the peasants of Brazil?

There is in Brazil an extremely sharp imbalance between economic and social development. A large part of this situation has a historical origin, coming from the oligarchical system which prevailed in Brazil from colonial
times to the middle-class, radical-liberal revolution of 1930. Up to 1889 agriculture was based on African slave labor. From 1889 to the first decades of this century the peasants, descendants of the slaves, if technically free, were totally dependent on the farmers and landowners.

Today the peasant population represents 42 percent of the total. Ninety percent of the peasants earn about forty-five dollars or less monthly, and live at the subsistence level. The Brazilian model of economic development during the last ten years of the military regime has been characterized by a strong concentration of wealth and income. The 70 percent lower section of the population earns only 28.2 percent of the total income, while the 10 percent higher group gets 47.8 of it, of which 34.9 percent is earned by the 5 percent highest sector.

This concentration of income, which has further increased over the past ten years, is regarded by official spokesmen for the government as an undesirable but unavoidable effect of a strong development process in the frame of a market- and free-enterprise economy. It is alleged that once a higher and stable level of economic development is achieved, redistributive measures can be adopted without hindering the economy. As a matter of fact, there is today in Brazil a growing controversy, even among supporters of the present regime, concerning the advisability of immediately starting a less regressive economic policy. The Geisel government seems to be inclined to adopt that policy.

Would you say with Ivan Illich that man will adjust to the facts of life as defined by Limits to Growth? Is Latin America becoming aware now that there are definite limits to development?

I am afraid that Limits to Growth is still only a matter of concern for a few intellectuals. Nevertheless, it is beginning to influence some decision makers. In that sense the irresponsible demographic policy of former times is changing. Several political leaders are becoming conscious of the correlation between the excessive expansion of population and the difficulties in improving the living standard of that same population. Perhaps the best example today is Mexico, a country with high population growth - more than three percent a year, which is considerable. But they have become demographic conscious and are now willing to plan their population.

In spite of the Church.

Yes, in spite of the Church. You know, everything in Mexico is being done in spite of the Church. For in Mexico, the Church, in contrast to what has happened in the rest of Latin America, remains very unprogressive.
President Echeverría is a man profoundly conscious of social problems, profoundly interested in raising the living standard of the Mexican people, and therefore his government is now trying to establish a policy of demographic moderation.

Would you say with René Dumont that the haves, the rich countries, need more emphasis on civic and moral values?

I don't know all the books by Dumont, but I have read his books on Cuba. He is an expert on agriculture as well as sociologist. He wrote two books on Cuba; one very favorable, and a more recent one, a bit more skeptical, because he feels that Cuba is not taking what he considers to be the real socialist line. He contends that Cuba is becoming more authoritarian than truly socialist.

I believe that the problem of the developed areas of the world are extremely complicated. They are sometimes simplified by people from the area concerned and by people from the Third World. If you take the overall picture, the developed countries of the world are indeed quite well developed. But if you go into detail and closely examine the specific data about the developed countries, if you observe how Mr. Smith is living, you see that Mr. Smith is still living rather modestly. I believe that there is still a great deal of redistribution to be achieved also in the developed world. We are very, very far away - I would not say from a fair world - a fair world will perhaps never exist. But we are still far from what could be called, in today's terms, a tolerable world. There is a lot of poverty in America, a lot of poverty in Europe, so in fact there remains a tremendous amount of redistribution to be accomplished. You know, the rich everywhere have tended to play with the future. They say to the poor, Okay, you are poor now, but you will be a bit better off tomorrow! If there is development, although the rich get the lion's share of tomorrow, there's always something to be gained for the masses.

I believe that in the moment we are living now, and considering what we may expect to gain in the future, in the conditions of a world close to saturation, that the redistributive question becomes more important. I am thinking of redistribution, in the first place, from the rich to the poor sectors, both in the developed and the underdeveloped worlds. And, likewise of a redistribution from the developed to the underdeveloped countries, in the global context of our small planet.
29. Hernán Santa Cruz


*In 1973 you attended, as representative for the Allende government, the Conference of Nonaligned Nations in Algeria?*

Yes. This conference was split up into a Political and an Economic Committee and I presided at the latter.

*Was the energy crisis of October, 1973, already foreseen?*

I think so, but not in its full magnitude. The most important feature of this Algerian Conference was, in my view, the emphasis on the improvement of relations among the developing nations themselves. In particular, strong efforts were made to arrive at some kind of association of producers in order to reinforce our bargaining power. Secondly, we aimed at the establishment
of an institution which could act as a nonaligned development authority financed by the developing countries themselves. This institution could then assist in rendering financial and technical aid and assistance to member nations, while at the same time it should be directed at increasing commercial and industrial relationships amongst the developing nations.

In other words the Algerian Conference set up its own World Bank. Not exactly, because what this conference intended is in some respects less and in some respects more. First of all, so far it has not reached beyond the project stage and its scope will be limited. Secondly, it is more than a World Bank, because if established it will only give financial assistance to developing nations, and in any case not under the same conditions as the World Bank in Washington, D.C., does.

With its well-known political ties to pro-American policies.

In our case the idea was to establish an institution which is to operate without any political strings and which is to favor the establishment of combined industries in developing nations. It is also to assist their associations of producers, facilitate the marketing of its commodities, and on the whole assist technically and financially the nations of the Third World. This is what we actually have called in the past an International Authority for Development within the United Nations framework. However, we never got anywhere, because of great-power opposition.

The 1973 Conference of Nonaligned Nations reiterated the positions taken during the first conference in Algiers in 1967 by the group made up of seventy-seven developing countries, as well as those that approved the Declaration of Principles and the Program of Action at Lima in 1971. We agreed, in 1973, that no progress had been made in the discussions between the developed and developing countries concerning increased economic cooperation, trade, finance, transfer of technology, shipping, and so forth. We agreed that up to now the objectives of the strategy for the Second Development Decade, solemnly proclaimed by the General Assembly of the United Nations in 1970, had likewise not been fulfilled at all. We agreed, therefore, that with the crisis continuing and getting even worse in relation to international cooperation for development, we should begin to rely even more on ourselves.

There have already been in some regions a number of schemes and subregional projects of cooperation among developing nations. In my opinion, the most outstanding in this respect is the treaty of Cartagena, whose principal objectives are economic integration and cooperation as well
as the establishment of a common market. This treaty is called the Andean Pact, and Venezuela, Colombia, Peru, Ecuador, Bolivia, and Chile are part of it. However, these objectives and aims are not enough. We have now deemed it necessary to go even further and to really unite the strength and resources of the developing nations, which, in effect, are considerable.

First, with the current scarcity of raw materials in the world - after all, the energy crisis is only one of them - we know that our raw materials are needed and wanted much more than during the two past decades. Suddenly the world seems to have become aware of the limitation of its natural resources and of the threat to the environment posed by some of the substitutes for these resources. Secondly, there is no doubt that the developing nations have acquired considerable experience over the past twenty years in all these fields.

In dealing more effectively with the rich half of the world?

Yes, and also in dealing with the economic and technical problems of development. Now, we have defined our targets. We also have defined the obstacles that we are facing and the magnitude of the external obstacles standing in the way of our development. Furthermore, we now have thousands of skilled men and women in developing lands whom we did not have ten years ago. With that large, skilled force we can certainly achieve much better results.

Unfortunately, however, a rather large number of that skilled force are being lured by a ‘rich’ life to the developed nations - the ‘brain drain.’

That is true, unfortunately. The magnitude of this drain is tremendous. But, on the other hand, a new generation with stronger national loyalties and with a new sense of values is developing in the Third World very fast above all in the socially and politically more advanced nations of the developing countries.

The rich nations have been stunned by the cut in oil supplies and the rise in prices. What should the developed world do now as a matter of priority? How should it react?

It seems to me that the first thing the developed world should realize is the magnitude and world importance of the problems of underdevelopment. The present order which determines economic relations with the developing countries should be replaced by a new international order based on sovereign equality, interdependence, and common interests among all states, as stated by the Declaration approved by the special session on resources of the UN
General Assembly on May 1, 1974. Accelerating the economic and social development of the Third World is the very first thing to do. This fact should be also accepted politically. It should be realized in the rich countries that this is an absolute priority for all the countries of the world; the need to dynamize the economy, increase the standard of living, incorporate millions and millions of people into the economic circuit - as producers and consumers - and incorporate them into the cultural life, take them into the mainstreams of the world. This should be the basis. Without it, I do not see any possibilities of real and true understanding or the initiation of important and significant policies in favor of development.

If this is condition number one, would condition number two then be that Western nations learn to truly share their technological and scientific know-how with the developing world?

Of course, this too would be necessary. But I still feel number two should be the realization in the developed world that the actual rules and practices that presently govern international economic relations are totally obsolete. They need to be completely rephrased and reshaped on the basis of an entirely new international division of labor. And, naturally, if you want to implement these ideas, this new economic target, then you have to extend an important priority to the free transfer of science and technology. I want to add that I am not thinking merely of a free exchange of technology for the future. What should be done is that the developed nations should help to assist the developing nations in the evolution of their own technology. This means technology adapted to the needs and the realities of the developing nations themselves.

The same approach should be taken toward problems of finance or the economy. New formulas should be found to provide more resources and better conditions to finance the social and economic progress of the developing nations. Today, with the international energy crisis on, it is abundantly clear that the developing countries on their part could help the developed nations with their raw materials, human resources, and consumption capacity. This has never been clearer. At last the world realizes how important it is for the advanced nations to develop the area in which two-thirds of mankind lives, and to develop it as a consumer territory. At this moment, when we consider the developing world on a whole, we find that no more than ten or fifteen percent of its inhabitants are real consumers of industrial goods. The day will come when the developed world will find out that it is in their very own interest, perhaps not so much their immediate interest, but certainly in their long-term or medium-term interest, that to assist in increasing the

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number of consumers of industrial products in the developing nations is just as important to them as their own economic stability or economic and social welfare.

*The interdependence of economic and social welfare in the rich nations with that of the developing nations should be plain by now.*

Well, I hope this is beginning to be understood in the developing world. Once they understand this, clearly and widely, measures will follow. Up to now, we have only listened to endless declarations and statements from leading personalities in the United States or Western Europe recognizing this interdependence. The logical consequence of this concept is the constitution of a new economic world-order, agreed upon by the developed and underdeveloped countries, and which would take into account everyone's interests.

*Are you not a bit too optimistic?*

No. I am not saying that this understanding, this needed conviction, already fully exists in the developed world. The reservations expressed by the US and other Western countries to the General Assembly resolution of May, 1974, are quite discouraging. But I am convinced that they will realize the imperative need to change their attitude. It appears that a new mentality is building up, and once it does arrive, effective measures would follow and in the process an entire new form of collaboration between the developing and developed nations could ensue. Some governments are still prisoners of old concepts and policies. Up till now, we have lived mainly by confrontation, because there has been no true understanding. During all these years of hard struggle, within the United Nations and elsewhere, we have never yet received sound reasons for not accepting our proposals. All we have been faced with were delaying tactics or arguments that measures would not yet be opportune, that the pound was falling or the dollar was in disarray. The nations that attended the Algerian Conference are now convinced that the measures we proposed at UNCTAD III, measures directed toward the development of the developing nations, are just and sound. This conviction was reiterated with great force at the special session on resources of the UN General Assembly, to which I have already referred.

*These proposals were probably not taken seriously by the rich club of nations.*

Probably not. At its regular session in 1973 the General Assembly stated very clearly that the objectives and targets set up in the Strategy for
Development not only have not been reached but that there have been many severe setbacks. No objections were raised to this statement.

As you know, the MIT study Limits to Growth, sponsored by the Club of Rome, gave fresh impetus to the planetary debate whether to grow or not to grow. Leaders in the Third World seem especially unanimous in demanding further rapid growth.

I agree with this point of view. The world needs to continue to grow. At the same time, however, I think that new policies of conservation and consumption have to be implemented. Resources are limited. They should not be wasted as has been done in the past. On the other hand, a much wider and better distribution of income should be applied the world over. We should apply this principle to the world economy the same way in which nations strive toward a just distribution of income within their own society. I am not in favor of the theory that economic growth should enrich a few countries indefinitely and that with the surplus of this wealth the rest of the world should live or should be allowed to grow. The fact is that growth has been very limited and has been extremely slow in the developing nations and extremely rapid in the industrialized world. However, of late, policies have been developed that are liable to change this process. I believe that a large and bold program based on cooperation and understanding between the developed nations and the developing nations should be brought about.

I recently attended a symposium of the OECD in the company of distinguished politicians and scholars from both the developed and developing countries. We discussed the report of the president of DAC. DAC is, as you know, the committee of development assistance of the OECD in Paris. It presented a report on the activities of the year 1973. Naturally, the discussions centered on energy and all types of relationships between rich and poor countries. There was broad agreement about an urgent need to create a new economic order in the international field. The interdependence of problems of resources, environment, financing, development, and monetary systems were very clear to everyone. It is my own point of view that if the leaders of the world had sufficiently stressed the links between the economic and social relations of all peoples, and had sufficiently cautioned against unilateral actions, the world would be in considerably better shape. Belatedly, the rich nations seem to have become aware of global interdependence and the ultimate limitation of resources. Only now, following the crisis of late 1973, are they prepared to accept that they do depend in many ways on the developing nations. We in the developing countries were very much aware of these problems and we have been stressing for years that

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problems of development should be dealt with as part of the whole. We have continually stressed that a new order of things was urgently needed and that in the framework of a new order in the world the progress of the developing nations would play a decisive part. All the crises the world has suffered recently - the monetary crisis, the energy crisis, the environmental crisis - have proved us to be right. We never asked special privileges for our lands without giving something in return. But I have the impression that a new mentality is developing. Never before did an economic gathering including developed and developing nations such as that which took place in April, 1974, in New York, have such widespread influence and repercussion. We saw daily reports about it on worldwide television.

In other words, mankind on the whole is becoming more aware of the problems we face together. In this respect the MIT study Limits to Growth played its part in raising human consciousness on these matters of survival.

Well, it is undoubtedly true that the thinking of people around the world is moving into the directions of Limits to Growth. These are hard facts which cannot be ignored any longer.

Eindnoten:


30. Kakuei Tanaka

Prime Minister Kakuei Tanaka was born May 4, 1918, in the prefecture of Niigata, Japan. In 1936 he obtained a certificate from a technical high school in Chuo. In 1943 he founded the Tanaka Construction Company, Limited. Four years later he was elected to the House of Representatives for the Liberal Democratic Party (LDP). In 1962 he
accepted the first Cabinet post, as Minister of Finance in the second Ikeda Cabinet and remained in this function during the third Ikeda and first Sato Cabinets. In 1972, when he was elected president of the LDP, he was also appointed Prime Minister of Japan. This conversation took place in the Prime Minister's office in Tokyo. An amusing detail can be added. While the author was trying to get an appointment with Mr. Tanaka, he finally received a telephone call at the Imperial Hotel from a secretary, saying, ‘You can come to meet the Prime Minister on October 24 at two P.M. This was Henry Kissinger's initial appointment hour, but he had to go to Jerusalem because of critical developments in the Middle East.’

You once said that the ideas expressed in your book, Building a New Japan: A Plan for Remodeling the Japanese Archipelago, cannot be realized if the ideas of the Prime Minister do not keep up with the extremely rapid changes in world developments. What is your opinion of the approach followed by the Club of Rome in relation to studies of the future and our chances of survival?

In view of the present circumstances in which the average life expectancy of man has increased and in which an increase in the birthrate cannot be prevented, it is inevitable that the world population should be constantly increasing. An additional and necessary factor is that living standards of the developing countries will have to be raised. I therefore disagree that percentages of growth would have to be zero. However, I certainly agree with the idea that within the framework of a reasonable growth rate room must be found in which we should aim at world peace and the happiness of all people.

Your approach to international matters seems to leave the road open to personal and cordial relations in comparison to the traditional Japanese approach. That is to say, modern Japanese diplomacy seems unbound by customs and is rather unorthodox. Are you in favor of direct and open diplomacy at the summit?

At the moment there is a general tendency which aims at world peace. I expect that this tendency will continue. Nevertheless, we are still faced with numerous difficulties. It is necessary that we try to achieve agreements by means of prolonged procedures with the help of conventional diplomatic
methods used in the conventionally diplomatic field. But in addition to gradual consultation, there is another possibility, namely, that a fundamental agreement can be reached at a summit conference in regard to a certain development and that diplomatic activities should be based on this approach and be used as a starting point. I am of the opinion that this method is a very efficient one. I believe that diplomacy which aims at the happiness of man and at permanent world peace, achieved at the summit, which at the same time concerns itself with specific international questions, is an indispensable and new form of diplomacy. I am convinced that it is one of the methods for us to arrive at rational solutions and that everyone, no matter what generation he belongs to, will agree with this.

Do you consider frank and spontaneous opinions as expressed during summit conferences an effective method too?

Until recently the assumption prevailed in circles using conventional diplomacy that diplomacy had to be aimed at protecting the interests of one's own country. Up to now this rigid approach has prevailed in regard to most international diplomatic conduct. However, during a lengthy, time-wasting procedure, one gradually becomes aware of what one can really achieve by repeatedly holding summit consultations and allowing certain matters to be dealt with one by one, exactly like the moves of a game of chess. We have always thought that this was what constituted diplomacy. Consequently, traditional diplomacy has always needed an exceptional amount of time. A clear disadvantage, however, is that in the course of these lengthy negotiations, from beginning to end, the actual positions taken do not penetrate to higher authorities because this kind of diplomacy is essentially based on lengthy and gradual procedures conducted by lower-echelon diplomats.

Today the world has become smaller. There are major issues which are in urgent need of speedy solutions. In 1973 an armistice in the Middle East was arrived at as a result of direct contacts by phone between leaders of the United States and the Soviet Union, as well as by the dispatch of negotiators. We ourselves are now using a hot line to the White House. The representatives of the United States and Japan can now speak to each other directly by telephone. This is a very rational method. For the same reason, the method of holding summit conferences does not result in wasting time, as used to be the case during successive and lengthy old-fashioned negotiations. A summit conference should take place in such an atmosphere as to enable leaders to frankly maintain their own point of view so that some
degree of agreement can be achieved. It might be said that an approach by means of a summit conference is a drastic way of doing business. But in my opinion, this is, nowadays, the only proper one. Every country in the modern world is now demanding it. I therefore think that this form of diplomacy has become inevitable. For world leaders to exchange summit visits is no longer a matter of sheer protocol, for they have to know each other's problems thoroughly in order to assess them and in order to be able to arrive at definite conclusions during the meetings. This applies both to world problems as to problems of the two countries concerned. Final conclusions are then incorporated into the administrative structures. The forms in which this is being done are being constantly improved. The summit conference should be free from diplomatic techniques and customs if maximum results are to be achieved. Summit diplomacy is both necessary and unavoidable in modern diplomacy. If no spontaneous and concrete opinions could be exchanged at the summit, I think that it would make this kind of conference quite meaningless.

Could one say that Japan feels today closer to the United States than to Europe? Have you, as a result of your recent visit to Europe, arrived at the conclusion that it will be possible to improve communication with Europe?

When we look at the trade figures, it is quite clear that relations between Japan and the United States are very close indeed. The total trade volume - the sum of the direct and indirect trade volume - between Japan and the United States in 1973 amounted to thirty thousand million American dollars. In addition, we have, as I said before a hot line with Washington, so the President of the United States and the Prime Minister of Japan can speak to each other directly at any given moment.

Against this background, the trade volume with Europe in 1973 amounted to about seven thousand million American dollars. This is about ten percent of the total trade volume of Japan and about three percent of the total trade figures of the European Community. In this respect it may be said that the diplomatic pipeline between Japan and Europe has been a narrow one. But at present, there are numerous new problems which make closer cooperation between Japan and the Common Market unavoidable, such as international monetary questions, the creation of new trade agreements, questions concerning raw materials and energy, aid to developing countries, environmental protection, and so forth. I am convinced that Japan and Europe will come closer as a result of my visit to Europe in 1973 and at the same time communication lines between Japan and Europe will become more open.
Do you think that you will be able to realize your revolutionary plans for the speedy modernization of Japan?

Japan is smaller than the state of California. And, moreover, thirty-two percent of its population is concentrated on one percent of its total land area. This is the present situation. But at the moment we are promoting various projects which may be completed by 1985, such as 7,000 kilometers of railways for a new superexpress train, 10,000 kilometers of highways, 1,100 dams, provincial towns in various regions, and university towns. I am convinced that I will easily be able to bring this whole enterprise of modernization to a successful conclusion.

Japan is going to restrict its exports to about 337 billion American dollars, that is to say, the greatest export restriction so far. At the same time, Japan is going to set up a steel industry in the People's Republic of China. When you look at the relations with the People's Republic of China in two ways, namely, against the background of your historically spectacular visit to Peking and the fact that China is your largest neighboring country on its way to development, in what direction, do you think, will the economic and human relations between your two countries develop?

Since the normalization of diplomatic relations between Japan and the People's Republic of China, the economic and human relations between Japan and China have been promoted in a flexible way. Japanese-Chinese relations have had a history of 5,000 long years behind them. When we recall the history of our relations over many centuries, I am convinced that the absence of relations during the last fifty years will not produce any major obstacles. The People's Republic of China has more than 800 million inhabitants. The friendship between Japan and this neighboring country will grow to everyone's complete satisfaction and will be broadened continuously.

I have had talks with students of the Hitotsubashi University and I received the impression that many of them are aware of modern world problems. They are becoming increasingly aware that urgent steps should be taken now to secure Japan's survival in the future. But they also show a lack of confidence in world leaders. What do you expect from, or what do you demand from, the younger generation of Japan; or, in a wider sense, from the whole world, as far as the future is concerned?

The development of communications has made the world a much smaller place to live in. The time is past when every country could exclusively pursue its own interests. In your own part of the world, we see that the nine
countries of the European Economic Community are making efforts to expand and unite. Young people everywhere will have to take over the world of tomorrow. I hope that they will seriously consider the question as to what this new world will have to look like as well as question of what concrete diagnosis should be arrived at in order to realize the most ideal picture. By only criticizing the present world, no solution will ever be arrived at. It is my wish that youths occupy themselves with studying concrete examples; that is to say, with the question as to how everyone will have to fulfil his own obligations so as to support and strengthen the world. For tomorrow's world will, in the end, depend on them. And finally I would say this. During the entire history of man, no matter during what era or period, the young have always met their obligations. In doing so, they have continued the history of man. This is something that should not be forgotten.

Eindnoten:

2 Prime Minister Tanaka pointed at a white phone which was placed next to a battery of black telephones at his desk.

31. Jermen M. Gvishiani

Jermen M. Gvishiani was born in Georgia, USSR, in 1928. He studied sociology and philosophy and became what is called a corresponding member of the Soviet Academy of Sciences. In 1951 he studied at the Institute for Foreign Relations. Then he served in the Soviet Navy. In 1965 he was nominated deputy chairman of the State Committee for Science and Technology of the Soviet Academy of Sciences. From 1966 to 1968 he lectured in philosophy at Moscow.
University. Since 1969 Professor Gvishiani has been concentrating on management problems, heading a special faculty which is doing concrete social research. Dr. Gvishiani is married to the daughter of Prime Minister Aleksei N. Kosygin. His wife, Lyudmila, is a historian in her own right and some years ago she published a 328-page study, *Soviet Russia and the USA: 1917-1920*. In 1962 Professor Gvishiani published a study on Soviet business practices, *Sotsiologia Biznesa*. In 1972 appeared *Organization and Management*. That year Dr. Gvishiani became chairman of the International Institute for Applied System Analysis (IIASA).

In 1971 you told me that a model like the one in *Limits to Growth* tended to neglect the necessary psychological and social factors, and that a multidisciplinary approach to these problems was needed. At present, Club of Rome teams in Japan, the Netherlands, and Latin America are creating new global models employing this multidisciplinary approach.

Deep and apparently irreversible changes are taking place in the world we live in. The tremendous growth rates of social development, the transformation of science into a direct productive force, the constantly increasing impact of mankind on its natural habitat, the contradictions of scientific and technological progress - these are all facts which make even invertebrate idealists think in realistic terms. Mankind today is confronted by new problems which create a justified anxiety all over the world. One such problem, the limits to growth, has already been widely discussed among politicians, scientists, and the general public. The Club of Rome played a notable role in attracting public attention to these matters especially in your country, the Netherlands, I understand. The publication of the MIT study has caused anxiety, in certain cases some pessimism, about the future, and raised considerable controversy.

Soviet scientists are quite familiar with the activities of the Club of Rome and other similar groups. We maintain certain differences in our approach to such question as the limits to growth as well as to evaluation and interpretation of the MIT world-model. However, cooperation on global modeling is gradually developing. One example is the newly founded Institute for Applied Systems Analysis in Vienna, where Soviet scientists actively participate and where also, for this year 1974, a series of conferences on these matters is organized. Incidentally, these are attended both by Soviet scientists and members of the Club of Rome. One can hope that the meetings
will outline new methods of global modeling and use multidisciplinary approaches
to these problems, which above all will reflect reality more closely. An important
role in achieving success in this field is attributed to the improvement in political
developments in the international situation, or, one might say, the performance of
wisdom on the international scene.

In writing the first volume of interviews of Western scientists, I came across a situation
in which I was asked by a prominent economist from Yale why he should sit down
with Professor Forrester at MIT to discuss Limits to Growth, because, he maintained,
‘I am an economist. What will I do with a systems engineer?’ Professor Barry
Commoner sounds lonely when he advocates over and over again the social
responsibilities for scientists to society as a whole.

The question of mistrust and professional jealousy among scientists is perhaps
more of an ethical nature, although it does originate from the social responsibilities
of the scientist in general. After all, a scientist, like any other member of society,
cannot live in splendid isolation from common goals and needs. Professor Commoner
is right stressing the social responsibility of scientists toward mankind.

But let me return for a moment to the importance and necessity of the
multidisciplinary approach to large-scale problems. For us this necessity has become
an indisputable fact. It has already led to the organization of scientific teams with
researchers representing many different disciplines. Irrespective of how qualified an
individual scientist is in his particular field, when applying systems analysis to
complicated problems, he needs the cooperation of scientists and specialists in many
other fields.

In the USSR Academy of Sciences, in the State Committee of the USSR Council
of Ministers for Science and Technology, and in a number of other scientific
organizations, we now have numerous multidisciplinary teams already functioning.
They are scientific councils investigating various complex problems. They unite
leading Soviet scientists and other highly qualified specialists. The councils render
important assistance in developing programs and decision making on the state level
in solving major economic problems. The experience of these scientific councils has
proved to be a highly efficient way of organization. As an example I could mention
the Council of the Academy of Sciences on socioeconomic and ideological problems
of the scientific and technological revolution comprising economists, philosophers,
engineers, sociologists, lawyers, geographers, mathematicians, and biologists.

Soviet scientists are of the opinion that problems of human development

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and rational use of natural resources are global, and that they can only be dealt with
by the joint efforts of various sciences and scientific groups. Scholars of the USSR
Academy of Sciences are providing methodologies for the economic evaluation or
utilization of the main natural resources and participating in drawing up scientific
and technological forecasts of possible changes in the biosphere within twenty to
thirty years under the influence of the combined productive activities of our global
society. Such forecasting needs the widest exchange of information between
representatives of different fields of knowledge.

Professor J. Bronowski of the Salk Institute in La Jolla, California, has been
advocating for some time now a separation between government and science as in
the past between government and Church.

Soviet scientists fully recognize their social responsibilities. It cannot be otherwise
in our country, because of one of the basic principles of Soviet society, namely the
incorporation of science into social organisms. The aims of science are formulated
in conformity with our social motivations. Soviet scientists do not consider science
to be a purely academic activity isolated from practical social goals. They look upon
it as an important instrument for improving social development.

That is our point of view regarding the relationship between the state and science.
Scientific goals coincide, as state policy is also aimed at the welfare of all members
of society. Therefore, for us it makes no sense at all to separate science from the
state.

One conclusion I drew from my seventy interviews with Western scientists was that
they almost all seemed pessimistic about the future. In socialist countries my
experience is different. When I related to Professor Moisey A. Markov that Toynbee
had expressed grave concern to me about the future of his grandchildren, Markov
replied, ‘I, too, have grandchildren, but I am sure they will have a great future.’

Looking after the destiny of future generations is our prime and honorable task.
But at the same time it is a difficult task. Here, I do not share the views of some
Western scientists who do not believe in the ultimate victory of human wisdom or
in the happy future of our children and grandchildren. On the other hand, though
opposed to pessimistic viewpoints, I should like to caution against unwarranted
optimism. Optimism should be based solely upon the management of social
development, upon the recognition of future social consequences of the decisions
we took in our time. In this connection we recognize that conscious management,
planning, and forecasting of

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social development are beginning to play a vital role; they are widely employed in our country. Therefore, optimism should not only be based on abstract hopes. Its very essence is the desire to understand the future and to manage the processes of development in all necessary directions.

Furthermore, speaking of the future of mankind or the destiny of our planet, or for that matter, the destiny of life on earth, one should stress that all people in the world are vitally interested in avoiding thermonuclear war. All states are equally interested in thwarting the danger of ecological catastrophe. But neither of these tasks could be solved by one country alone, no matter how powerful it is economically. What is necessary is to find a solution through a collective effort on an international scale. What is required is the joint work of all peoples and states who have realized what their common problems are, namely that we are faced with problems that do not depend on existing differences or contradictions.

We are all divided by differences in our social systems, our languages, and our working methods. But the elements that unite us are acquiring an ever-increasing importance. When we think of the future, we should always keep in mind that it is shaped by people. The destiny of man lies in the hands of man.

*In your book* Organization and Management, *you said that imperialism was the highest and last stage of the development of capitalism, and you rendered a detailed analysis of the operation of monopoly corporations. But in September, 1973, attending a conference of some 650 industrialists from seventy-five nations in San Francisco, you expressed, on behalf of the USSR, the willingness ‘to enter into a planned and programmed cooperation on a stable and long-term basis’ with capitalist companies of the West.*

The conclusion that imperialism is the highest and last stage of the development of capitalism was drawn by Lenin as a result of analyzing the development of capitalist society. Lenin proved that the economy develops through the concentration of production in creating a world economy. However, in capitalist societies, the international division of labor, mutual cooperation, and combined specialization develop spontaneously and take contradictory forms. The appearance of multinational capitalistic corporations is the result of the contemporary high level of socialization of productive forces in capitalist societies.

*You have also spoken of the necessity of stimulating social progress through economic development ‘for the destiny of all life on Earth.’*

In the socialist economy, expansion of production and the increase in the
productivity of labor are not ends in themselves. In the USSR, economic problems are subordinated to social goals. This means in effect that economic plans constitute part of an integrated program leading to the socioeconomic transformation of society. We know therefore of no opposition or contradiction in social development in relation to economic growth.

Often, humanists of the past were true utopians. They tried to carry out social transformations irrespective of economic development and without taking into account technological progress, often without even stimulating such progress. But are modern humanists, who often propose giving up economic growth, really devoting themselves to finding solutions for our social problems?

In many regions of the world we are faced with poverty, starvation, and economic backwardness. Even in the developed industrial nations, the problem of satisfying the vital needs of the population as a whole is not yet solved, especially when we take into consideration that the needs of people are also growing. Therefore, the problem is not to stop altogether or even to considerably limit economic growth, but to ensure economic growth in the most effective way. After all, only economic growth will create the real conditions for improvement in living conditions of the human race.

Sicco Mansholt has called the energy crisis a blessing, for he expects it to bring Europe to its senses, making it aware ‘that there are precise limits to the earth's resources.’

The present energy crisis is not related to the problem of future shortages of fuel resources. It is more likely to be a reflection of contradictions between the advanced capitalist countries on the one hand and the developing countries on the other. The giant multinational corporations deliberately utilize these crises for their own political, commercial, and financial speculations aimed at ever higher profits.

These crises, we have seen since 1973, might be called a rehearsal of what can happen to our world in the near future. To a certain extent, this situation might encourage a search for new energy sources. I think, however, that the problems of future energy supplies are considerably more complicated. Nevertheless, international cooperation among scientists in the energy field should bring new and sufficiently reliable and accessible energy resources.

C.L. Sulzberger mentioned in the New York Times that according to statistical evidence, crude oil and natural gas consumption in the COMECON countries would far exceed the area's production capacity by 1980.

In the USSR, both the current and future domestic needs in oil and gas will
be fulfilled by our national oil and gas industry. The oil and gas needs of CMEA countries will be partly covered by the domestic production and partly by imports. We never maintained that in 1980 fuel needs in socialist countries will be met by domestic capacities alone.

*The Club of Rome is presently engaged in a major planetary debate over how the tremendous gap between rich and poor nations could be narrowed or even bridged.*

This question of how to bridge the scientific, technological, and economic gap between developed and developing nations is a most urgent contemporary problem. All over the world very serious efforts are being made toward helping to solve it.

First, it should be pointed out that the most decisive and important step is undoubtedly to extend political and economic independence to the developing countries. The United Nations and its special agencies are playing an important role toward this end. In this connection we should note a recent proposal by the Soviet Union, submitted to the General Assembly, aiming at the partial reduction of military expenditures of all nations that are members of the Security Council. These funds, now used for armaments, could be fully utilized to render assistance to the developing nations. I consider this initiative by the Soviet government an important and concrete step toward reducing the gap in the social and economic development of nations.

*Prime Minister Kosygin announced the goal of selling 2.6 million automobiles to Soviet consumers during 1975. Does the USSR take measures to combat automobile pollution and the like?*

By the directive of the Twenty-fourth Congress of the CPSU on our five-year plan for the development of our national economy [1971-1975], it was announced that we were aiming at the annual production of from 2 to 2.1 million cars by 1975. In accordance with these targets we have been planning new plants and additional production lines for spare parts and other materials.

The Soviet Union has been taking drastic measures to combat environmental pollution by cars. We have issued standard regulations to limit toxic fumes in exhaust gases in compliance with international standards. We have also been improving automobile engine designs, while highways are being constructed so as to reduce traffic within urban districts. Our new freeways will bypass the concentrated areas of our cities and towns.

*All over the world, the stress on science and technology increases.*
Professor Mikhail Millionshchikov, speaking about the ninth Five Year Plan of the USSR, stated that you are now employing over 940,000 scientific workers in some 5,000 research institutions.

It is interesting to note that the number of research institutions and scientific workers in the USSR has considerably grown over the past two to three years. You must be citing figures Professor Millionshchikov gave some time ago. In April, 1974, there were 5,251 research institutions and 1,108,000 scientific workers in the Soviet Union. Therefore, one quarter of all the scientists in the world work in the USSR.

The international character of science has been manifest throughout time. However, in our epoch this feature of science was given a new stimulus. On the one hand, science was fostered by more distinct specialization in research areas. On the other hand, science, in our time, has confronted quite a number of vitally important problems concerning mankind. Furthermore, in many respects this was done on a global scale for the very first time.

Knowing of your personal friendship with the president of the US National Academy of Sciences, Dr. Philip Handler, I still would like to ask you whether you are satisfied with the present forms of cooperation between the Academy of Science in the USSR and its counterpart in the United States.

We have regular scientific exchanges with the Americans, both with the National Academy of Sciences and the Council for Learned Societies. The National Academy deals with the natural sciences and the Council with the social sciences. As a result of summit meetings and negotiations we have signed a number of special agreements which enlarge the sphere of mutually beneficial business cooperation between our two countries - another example of a creative approach to global problems. We concluded, for example, agreements on cooperation in environmental protection, space research, the oceans of the world, the peaceful use of atomic energy, transportation problems, agriculture, medicine, and problems concerning health services. We also designed joint scientific work in several fields, for instance, in problems concerning the power industry; transportation of energy, especially over long distances; the design and maintenance of powerful thermal and hydroelectric stations; problems concerning atomic energy, computers, and theoretical and experimental physics; the planning and organization of research; and new technologies in general. In several cases, an exchange of scientists led to the establishment of long-term scientific cooperation. Examples are to be found, for instance, in the participation of Soviet scientists in deep-sea drilling projects on the US research vessel 'global

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Another excellent example is the US-USSR cooperation in the International Institute for Applied Systems Analysis, as I mentioned earlier. This institute was created at the initiative of both our academies. We are definitely interested in scientific cooperation. A vivid example was given by Dr. Handler, who said in a speech, ‘My colleagues; we, US specialists, have but the highest praise for the research in astronomy, physics, and applied mathematics in the USSR. It is our opinion that research in the Soviet Union is under way in all directions and we recognize these as the most important in the world of science. The necessity for joint research is becoming more and more apparent.’

I think that the continued cooperation of these two largest scientific institutions in the world will further fruitfully develop, and newer and even more efficient and long-term forms of cooperation will be found, since this would be the key to the solution of important global problems of the future. Perhaps I should add here that from this development of international scientific and technological cooperation, further economic cooperation between nations could ensue. For it is quite obvious that when peaceful coexistence between nations is to be guaranteed, it will be strengthened by the further development of active economic, scientific, technological, and cultural cooperation. In other words, peaceful coexistence is not simply based on one agreement, but also on a large variety of activities which will further assist in creating mutually beneficial relations and an ever-widening understanding. I would even say that such activities could lead to a form of mutual dependence. This is why the main principles of Soviet foreign trade are based on the concept of a continued growth of cooperation. In spite of our own powerful economic, scientific, and technological potential, we are very much opposed to an ideology of isolationism. A historically shaped division of labor does exist. It is an objective condition of what I have termed the mutually beneficial cooperation among nations in the fields of science, technology, and the economy.

As a matter of fact, the most important feature of the contemporary stage in the development of economic relations between the USSR and the most advanced countries in Western Europe, Canada, and Japan is the transition from sporadic deals to a planned and programmed exchange of business on a stable and long-term basis. The same goes, of course, for the United States. Many agreements with large American firms and corporations have been signed, among them General Electric, ITT, General Dynamics, Singer, Monsanto, Control Data Corporation, Joy Manufacturing Company, Arthur Anderson, Hewlett-Packard, Bechtel, FMC, Dresser, ARMCO Steel, In-
industrial Mechanics, Philip Morris, as well as with the Stanford Research Institute. We are expecting to sign numerous more contracts in the near future.

This takes me back to the pessimism of some Western observers, who told me that they did not think our technological or scientific problems insurmountable, but felt that our human problems had become too awesome for the human mind to face, and let alone solve.

The problems now facing mankind are extremely complicated. Yet, the future still depends on man. I am still optimistic that we will surmount whatever may come, through the joint efforts of scientists, political leaders, and the public at large. But to achieve success, a much higher level of organization of society is needed. We shall have to create a purposeful management in the development of human life. Otherwise our optimism will be groundless and our efforts wasted. Therefore, I would once again remind you of the need for human wisdom in the creation of the future of mankind, since this future lies but in the hands of man.

Eindnoten:

1 Sicco L. Mansholt, Dutch-born agriculturalist, former Cabinet Minister of the Netherlands and vice-president and president of the European Common Market.

32. Saburo Okita

Saburo Okita, the Japanese Robert McNamara, was born in 1914 in Dairen, China. He was graduated as an electrical engineer from Tokyo University in 1937. He soon entered government service, and in 1956 became director-general of the Planning Agency. In 1963 he left government service and became president of the Japan Economic Research Center (JERC). He has established close personal ties with
the OECD in Paris, the World Bank, and other international organizations. In 1973 he was nominated president of the Overseas Economic Cooperation Fund of Japan (OECF). Saburo Okita is closely connected with the Club of Rome and is a member of its executive committee.

Ichiro Nakayana has written that as far as economics is concerned, solving Japan's problems could well mean solving the world's problems. Is Japan a microcosm of the problems that all the world will encounter in the near future?

Perhaps this is partly true, for many of the world's problems now exist in Japan, in somewhat condensed form. Examples are environmental limitations because of our very limited land area, very high population density, and a very high density of GNP per unit area. Ours is very similar to the situation in the Netherlands. Historically, we have the combination of Western and Asian elements. Industries in Japan have grown for the first time on different soil from the European and Western World.

Completely independently from Europe and America?

No, we imitate the advanced nations to some extent. We combine many of the world problems in our country. In this context Professor Nakayana was probably right in saying that if we succeed in finding solutions to new problems, many of the solutions may be applicable to the rest of the world.

After World War Two you had a laissez-faire policy in the Japanese economy. You let the economy grow fully through the engine of capitalism. Would you say that you now have to question the whole basis of a free economy? Is it necessary in relation to worldwide inflation to consider the psychological basis of capitalism?

I cannot agree that we have followed laissez-faire capitalism - that is something of the nineteenth century. We in Japan have in the twentieth century what one should call controlled capitalism. This came about after World War Two. We were taking advantage to the fullest extent of market mechanisms.

After the Second World War you had controlled capitalism?

We have had strong government guidance in many ways, including various forms of government controls. We basically followed the policy of

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market mechanisms and made our economy as dynamic as possible, without necessarily turning to a straightjacket type of control. In basic matters there has been some government guidance. As you mentioned, we have probably gone too far in this direction. It was all right to a certain limit until we attained a rapid economic recovery. But this tendency has gone too far, and is to the detriment of our society in many ways. Environmental problems, shortage of housing, a very sharp rise in land prices, and more environmental problems have many of us talking now about the reallocation of resources, about more social capital-building and about more redistribution of income in the form of social security and social insurance.

Isn't this Premier Tanaka's policy, to turn the wealth of Japan toward your internal problems?

We have been spending mostly for our own purposes in the past as well, but these expenses were directed at building modern iron and steel factories, large petrochemical industries, and other production facilities.

But what about the fact that only thirty percent of Japanese homes have running water in the lavatories?

This is what I said: social capital investment and a fresh water supply now have our fullest attention.

I was talking about lavatories, toilets.

The percentage is rising very rapidly, by now we have probably reached fifty percent. In the villages, even in the cities, we have concentrated in the past on recycling human debris, returning it to the soil. This has been the system we have followed for hundreds of years, until very recently. You might say this was a rather wise measure if you contemplate the environmental problems in returning human waste to the soil, using it as fertilizer for agricultural production. However, the rise in the use of chemical fertilizers and modern insecticides has also become a large problem. I think we will solve these questions within ten years. At that time all Japanese will have running water and toilets.

I only brought this up because when you spoke of petrochemical industries, I wanted to divert attention to basic social problems.

How would the concentration of wealth in Japan affect the rest of Asia? I am thinking of China and Southeast Asia. Could your wealth cause social discontent or tension elsewhere?

In other countries or Japan?
In Asia in general. How would your exploding wealth affect relations with China?
There may be jealousy. There may be some conflicts, but as long as we use our economic output for peaceful purposes and not for destructive purposes, then, generally, the dynamic nature of the Japanese economy may bring about dynamism in other Asian countries as well, with rising capital investment, through trade and sometimes through development assistance. This can already be seen in many parts of Asia. China is following a different system. We have limited contacts, mostly through trade. In recent years we have received many missions from China, since they want to learn, to acquire experience in our technology.

But how does this work in practical terms?
China will absorb what they need and what they consider appropriate for their basic conditions. This is what Japan did vis-à-vis the Western world in the past. We absorbed what we needed. Other Asian countries, which are economically and politically weak, may be suffering from Japan's overwhelming economic influence. But I don't think this concerns China so much. With Peking, we will have no serious problems, but in relation to young and weak Asian countries like Indonesia, I think we should encourage the building up of their own administrative capabilities. For Indonesians the human elements in our relations are very important and they do not want to be overwhelmed by us.

But is it not true that Japan seems indifferent to which governments it finances or supports with gigantic loans? Your Prime Minister ran into serious difficulties during his 1974 Southeast Asian tour. In Jakarta he was virtually a prisoner of rioting students. It should be remembered that these demonstrations were aimed primarily at corrupt governments, like those in Thailand and Indonesia, run by army officers who enrich themselves and don't give a damn about improvements that should be made in the living conditions of the people on the whole.

Not necessarily. What you say is a bit too extreme. Of course, we find growing nationalism everywhere in the developing world.

But I was speaking of Indonesian and Thai students who raged against their corrupt and unstable governments run by generals.
The newspapers stress as a cause for anti-Japanese demonstrations the behavior of the Japanese overseas.
Japanese shops, Japanese barbers, Japanese sauna baths, Japanese restaurants, Japanese food...

You know, a Japanese tourist organization recently undertook a survey with questionnaires for visiting Japanese tourists in Thailand. The result disclosed surprising things. Only three percent of the Japanese tourists were staying in Japanese hotels. Few ate Japanese food, because tourists want to experience something foreign. In any case, some of our overseas companies are now taking down their neon signs, which perhaps were too big, too visible. We are now taking measures to revise our attitudes of the past, since they only stimulate nationalism.

The Guardian recently described how you proposed a Japanese Marshall Plan for Southeast Asia for a period of ten years and up to an amount of twenty billion dollars. But everyone was against it?

Yes, I made that proposal in 1971. There are various aspects to such an aid program. Most of the criticism against it came from students. They objected to the ways in which Japanese businesses operate in those areas. Some of the critics said that Japanese firms were too efficient, that the Japanese work too hard, that local industry was losing competition. All this created resentment.

Have you given up on the idea of such a master plan?

There are politicians in Southeast Asia, like Foreign Minister Adam Malik of Indonesia, who want Japan to undertake a genuine effort to accelerate economic development for these countries. There are politicians in Japan who do not want us to exert too much influence, and urge us to be cautious in selling this idea. It is not that they are absolutely against aid, but government officials and political leaders, especially, are careful not to press too hard.

Is that why Japan is already investing more in North America - twenty-seven percent of its total - than in Southeast Asia, nineteen percent? It is perhaps easier for Japan to invest in the United States, because you and the Americans have the same business practices.

Our dealings with Europe and United States are running smoothly. These are market economies. They can be handled through normal business practices. One day, we will deal with the socialist countries, which are developing countries, and where the government is an important factor. Here, we may have to introduce a somewhat different approach from the purely business type of approach we use in the West.
The President of Mexico has proposed the creation of a code of ethics and conduct for businessmen all over the world.

I think this is an excellent idea. Of course, there is still excessive emphasis on national sovereignty. This sometimes prevents active use of natural resources, and may produce inequality, especially among developing countries. There is a gap between countries with natural resources and those without. There will be an even wider gap when oil and mineral resources are involved.

A wider gap? Let me get this clear. You mean through excessive nationalistic feelings?

No, not quite that. Stress on national sovereignty vis-à-vis resources may create another gap among the developing countries, between those which are endowed with rich natural resources and those which are not. A typical case is India. They have to spend two-thirds of their foreign exchange just to buy oil. Those are also factors to be taken into consideration. I do think the President of Mexico made a proposal based on a progressive idea. The question is how to implement this, but there is a growing awareness that in the modern world, developing countries are becoming independent and possess nationalistic feelings, so private enterprises that are going abroad should abide by certain rules or a code of behavior and refrain from excessive profit seeking.

To review the work done by the Club of Rome in Japan. The New York Times reported that one of the Japanese teams forecast that with the present growth rates in Japan by 1980 Japan would have to dump nine billion dollars in order to maintain the position of its economy.

Nine billion dollars is only the application of one percent of the GNP resolution of the United Nations. If the GNP is one trillion US dollars, then one percent will be about ten billion dollars. The Japanese government has committed itself to reach the one percent of GNP rule in foreign aid by 1975.

But is it not correct to say that if you don't export that money, your economy will get into serious trouble?

This is not a mere giveaway. A portion includes private transfers, private investments, or supplies as credits. There are commerical transactions. It includes development aid, in terms of official development assistance, which the Pearson Commission recommended, had to reach for all advanced nations seven percent of the GNP by the latest in 1980. But I don't know if
we can continue the present and past trends of growth into the future indefinitely, because our rate of growth is high and we may face limits to growth in the very near future.

*How will that manifest itself?*

Through growing resistance to a rapid expansion of Japan's export trade in the United States and other markets, for example.

*How do you view the present world energy-crisis in relation to the work of the Club of Rome?*

I think this is one of the indications that the problems the Club of Rome has been pointing out are hardly unreal issues, although the present energy-crisis is somewhat artificial due to its political nature. But it has brought about the general consciousness of the limits to growth, especially concerning energy-intensive physical-expansion outputs. Energy will be much more expensive, but this may be a blessing for human society in the long run. For Japan a reduction in supplies of oil meant a serious blow, since we depend very heavily on imported oil - about three-quarters of total energy consumption. Japan will have to change its industrial structure to a structure less dependent on energy and raw material consumption.

*What would be the effect of all these changes on the Japanese mentality?*

Japan will require tremendous changes in its social structures: shorter working hours, more social security, old-age pensions, more spending for housing, recreational facilities, urban development, and so on. Instead of the ever-increasing investments in steel factories, petrochemical factories, and shipbuilding facilities, we will need a shift in emphasis in the allocation of resources.

*Japan is now exporting pollution. In other words Japan is setting up polluting industries in other areas.*

Actually, Japan wants other parts of the world to share those pollution problems with us. We want an even distribution of pollution all over the world. Why should we have to concentrate the pollution in Japan by bringing into this country raw materials from all over the world, degrading, destroying natural beauty and our seacoast? There are many other places with much more available open space and much higher environmental capacities. Some countries want to have new industries; otherwise poverty will remain the worst type of pollution for them. Without industry they cannot increase their income. Of course we should be careful when we encourage industries to go
abroad. They should introduce the most modern technology in preventing pollution. We are accumulating such technology, because we ourselves are suffering heavily from pollution problems.

*Which international agency should exercise control? Which one could redistribute industry in such a way that there would be more equitable damage to the environment?*

We have no worldwide government. The question of the spread of industry takes place on a private or governmental basis.

*Should it be organized on a global basis?*

Maurice Strong can perhaps give some guidelines. But the implementation will be up to private industry or to individual governments. That is the situation as it is for the time being. However, it will become necessary to have global views on this matter, and international cooperation will be increasingly needed in the future.

*Is it true that awareness of pollution actually started in Japan around 1970?*

That's correct.

*When you discover something, you Japanese can make a change of 180 degrees faster than anybody else in the world.*

The Japanese government produced a new five-year plan early this year. It set targets for reducing air and water pollution by half in the three major industrial areas: Tokyo, Nagoya, and Osaka. The government estimated the cost of achieving this target was some twenty-five billion US dollars in five years. This would be quite within reach of our financial capability, because of our large gross national product. Therefore, this is a feasible target.

*You speak of twenty-five billion dollars in five years to combat pollution in Japan. I just learned that for five years the UNICEF had available seventy million dollars to help 200 million Indian children to get an improved diet. But let me ask you, How is the Club of Rome doing in Japan? Is it having an impact? Is it raising an interest in business and government circles?*

I think the start was relatively slow, but now there is an accelerating tempo. Many leading figures in government, business, and the scholarly world are becoming interested in the idea. At first, it was thought that the Club of Rome, and especially the MIT report, were forecasting catastrophe. That was a misunderstanding. And the zero growth parts were misunderstood. Growth is a very fine concept. We should sustain growth rather
than aim at zero growth, including the growth in the quality of life. People have come
to understand the nature of the Club of Rome, that we are not an institution spreading
a zero growth idea, but, rather, a club aiming to find the means of survival and finding
a positive solution to all our problems. This idea is now receiving wider and wider
support in Japan.

* Gunnar Myrdal tells me that it is nonsense to approach the problems of the world
  on a planetary scale, whereas Kenneth Boulding speaks of an ‘econosphere.’ He
  believes the ideal way is to study the earth as a whole. Scientists seem to have many
differing opinions about one subject. It is hard for the public to understand all this.
Are you yourself in favor of the computer approach by MIT? *

The computer approach is a very useful aid, an effective tool. We should not,
however, be employed by computers, we should employ them for our own purpose:
to assist our thinking and to clarify problems. Recently, our Finance Minister said
at a press conference that there is no computer that could act as Finance Minister for
all the world. You cannot make automatic decisions by extending the use of
computers. Somebody must pass judgment. In Japan, owing to the size of the country
and to the rapid tempo of change, we must solve the serious problems of future
growth immediately. So, many Japanese, including scientists, are becoming more
and more interested in the Club of Rome approach.

* And what about politicians? Scientists without links to politicians will get nowhere. *

This is indeed our problem. I recently had a discussion with Prime Minister Olof
Palme of Sweden. He emphasized the importance of a strong link between scientists
and politicians. I replied that in the case of Japan the dialogue between the politicians
and the scientists is still rather limited. However, a triangular conversation, with the
mass media in between, is now taking place.

* The media acting as interpreter for the people? *

That has been the case in Japan. We hope to have more and more enlightened
politicians, men who can talk directly to our scientists. There are in this respect
beginnings on all sides. Some of our politicians are awakening.
33. Kuan Yew Lee

Prime Minister Lee was born September 16, 1923, in Singapore. He studied at the Raffles College there and later at Cambridge. In 1949 he was graduated cum laude in law. After establishing a law practice he became, in 1952, counselor for the Singapore trade unions. In 1954 he founded the People's Action Party, which became affiliated with the international socialist movement. He was nominated secretary-general of this organization. In 1959 he was elected Prime Minister of Singapore. His party obtained victory at the polls in 1963, 1968, and 1972. It should be added that the author, in the following conversation, discusses only non-political matters, and touches on interior problems concerning Singapore. I felt this was not the place to bring up repressive measures against political opponents, press, censorship, and other hindrances to democratic government.

Is it correct to say that Singapore is turning into a brain center, the first global city?

That's too dramatic a phrase, but we are moving more and more toward the trade volume required. We must ‘plug in’ to all the centers of the developed world. This is a new kind of economic situation, one in which rapid transportation and communications have created a new economic environment in which we can play a modernized role like we once did in the nineteenth century.

This is a twenty-first-century city which you are building here in Asia, one in which you seem to follow the kind of attraction that Zürich has to
Switzerland - a financial center. You even invest in Indonesia, I understand.

I think it is exaggerated to compare us to Zürich; we can only develop certain characteristics of Zürich. We are as interested in becoming a Rotterdam, for instance, which Zürich could not be. Yes, we have always invested in Indonesia and Malaysia. It has been our traditional role, one which we see as a constantly evolving process of an interdependent world. As standards of living go up in the developed West, whether it's Western Europe, North America, or Japan, we play a part in the transmission of products from the developed countries to the less developed ones, where there is an abundance of labor at wages relatively low compared to those in Western Europe, North America, or Japan. Also, we have lower antipollution costs.

You made a very interesting statement in a speech of October 4, 1972. The Dutch ambassador drew my attention to this. You said that countries in Southeast Asia, Indonesia or Malaysia, for instance, would not be able to afford nationalism for another thirty years. You advised them to let the multinationals do their job, and perhaps after thirty years they can talk, like Sukarno used to, about ‘satu negara satu bangsa,’ or one country.

Well, either these nations want to develop quickly, in which case the easiest way is to import technology from Europe, America, or Japan, or they follow what the Chinese People's Republic has been doing, everything on the basis of first principles guided by the thoughts of Chairman Mao. But even the Chinese are now beginning to import machinery and know-how. Of course they will not improve their productivity with the thoughts of Chairman Mao alone, but rather with the help of machines that are coming in.

But don't you feel that in the thirty years that they let the multinationals take over in, say, Malaysia or Indonesia, that at the same time the original character of the country will be partly destroyed?

The Japanese have had the multinationals for twenty years, and their uniqueness as a people has not been destroyed. Their social ethos and social structure have survived industrialization and the multinationals.

Japan is a special case. From your speeches I gather that you think the Japanese - you call them the dynamo of industry and economy - the Japanese are first, the Americans are second, and the Europeans lag behind in your country. It is as if you said to them, Where is your spirit of
adventure? Why do you lag behind? If you are on the ball you can come here and invest and do great work. Is that true?

Yes. Technologically speaking, apart perhaps from space technology or some special industries connected with military technology, the Europeans are now as advanced as the Americans, even in aircraft production, medium-range and short-range aircraft. Perhaps in computers the Europeans are not yet quite so advanced. The idea of the EEC - European Economic Community - to confine itself to the Mediterranean Basin and to Africa seems to me an inward-looking idea even though you get all the climatic regions of the world. But it is still too small a horizon. Perhaps you have traditional links here in Singapore which could be revived, because people here, in the face of the massive investments of Japanese and American capital, would like to have a third capital investment as a balance.

But where would you set the optimum for economic growth? Your per capita income, after Japan, is the second highest in Asia: 1,500 US dollars or more.

Devalued US dollars....

Granted. But are you afraid of overdevelopment? That's what the Club of Rome is trying to find out through computer studies and other investigations.

I believe the critical task is to check population growth. If it is not checked, then we will run into critical shortages very rapidly. With zero population growth, even in the most developed countries it is still possible to have a positive or plus GNP growth. But this is not possible now. There must be growth, because the voters expect life to get better. We definitely will grow. The critical factor is population. Once we have the population rise under control, then we can sort out other things.

And in Singapore that's no problem.

The problem is population: you've got to check it.

Even in Singapore.

Yes, indeed. Otherwise the quality of life cannot go up.

You have already brought in one hundred thousand foreign laborers. I read somewhere that Singapore may even need five hundred thousand workers.

That's a temporary phenomenon. After a while, many of these industries will move out. When political stability is established in the countries around

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us, the guest workers will go back to their own countries. We just provide a base for
the factories and the workers because of our political stability and administrative
competence.

But, let us look at Singapore in this critical era, with trouble in Thailand starting.
While in Canada you made an interesting remark. You quoted Tanzania's President,
Julius Nyerere, who had spoken of the big powers acting like elephants trampling
the grass. You added that the thought had occurred to you that when the elephants
flirt, the grass suffers; when they make love, it could be a disaster. In other words,
how to you view Singapore's survival in view of the political forces around you?

Well, it's part of the problem we have to live with. There is a détente between the
Soviet Union and America. But it is a détente combined with competition in other
areas, including, I believe, Western Europe. There is no détente between China and
the Soviet Union. So it's an incomplete détente, for China is part of Asia and will
not just go away. The Russians have become very mobile and also will not go away.
Why should they? The Japanese are also a fact of life. Therefore, out of a competing
interest between the Americans and the Japanese on the one hand, the Russians on
the other, and China being another factor, there could be some kind of quadrilateral
balance after a period of transition, in which I hope that the farther away we are away
from the Chinese border the more freedom of choice for partners in progress we will
have.

So you cannot say you are comfortable about the political situation around you.

No country is really comfortable. I would think that from a purely political
viewpoint I have more freedom of choice than, say, Finland has. I don't have to look
over my shoulder to find out whether signing an agreement with the EEC will be
looked upon with disapproval. Eighteen months passed before the Finnish government
was able to sign their agreement with the EEC.

Are you optimistic that balance can be brought to economic growth and population
factors?

I think there is a mental block in the thinking of many of the leaders and among
the population of the developing countries. On the one hand they feel resentful that
the developed countries are using up so much of the world's resources. On the other
hand the people of the developing countries are reproducing at such a tremendous
rate that there are not enough resources even to feed the new population that they
have brought into the world.
Somehow, the leaders must become aware of these problems and in turn get it across to the population that if they want better standards of life, if they want a better environment, population growth must be checked and checked immediately. But that is still not the position of most leaders. Therefore, I am very pessimistic about the time it will require to achieve population stability.

*Are you familiar with the efforts of the Club of Rome to give man the knowledge how to manage the world in the future?*

Yes, I have scanned the results of the study made by the MIT team. I have also read the British *Blueprint for Survival*. The ideal population of the United Kingdom should be thirty million instead of fifty-five million. Here lies an obvious responsibility. It is one thing to express the ideal; another to achieve the practical result. The ideal would be zero or negative population growth and a limited GNP for most of the developed nations, allowing time for the underdeveloped countries to catch up. But that's not the way human beings behave. That's not the way nations behave. Therefore, there will inevitably be an unfair distribution of resources, owing to increasingly efficient organization in the developed countries and the continued inefficient management of population control in the developing world, which in turn will lead to catastrophes in large parts of the overpopulated Third World. That is a very pessimistic prospect, indeed.

**Eindnoten:**

1 In the Bahasa Indonesia language, this means ‘one nation, one people.’

**34. Mohit Sen**

Mohit Sen was born March 24, 1929, in Calcutta and studied history at Cambridge. As was the case with Tissa Wijeyeratne, the foreign
secretary of Sri Lanka, Mohit Sen, during his stay in England, joined the
Communist youth organization. (These men are friends, a fact which the
author only discovered after interviewing them.) He has been active in the
Communist Party of India (CPI) since 1953. He is editor in chief of New
Age for both its weekly and monthly editions. In 1965 he became a member
of the National Council of the CPI, in fact therefore of the Central
Committee. In 1971 he entered the Politbureau of the CPI. In 1973 he
became dean of the Central Party College of the CPI. Mohit Sen has written
several books, including New Lines and Dogmatists, Communism and the
New Left, The CPI and the Naxalites, and Indian Revolution - Review and
Perspectives. This conversation took place in the modern twenty-story
party headquarters in the center of New Delhi.

Most Western observers look upon the population problem as the most urgent for
mankind. The world now adds some 75 million new lives a year. In India some 55,600
babies are born daily. Indonesia adds three million a year. But Madame Gandhi
stressed to me that population control should be voluntary.

The Communist Party of India is certainly concerned over the rate of population
growth in India. It would like this rate to slow down. But it does not agree that this
is the most urgent question. The poverty, misery, and inequality in India is not due
to the overproduction of human beings, but to the production and reproduction of
capitalism in India. For more than a quarter of a century, the ruling Congress Party
has placed our country on the capitalist path of development. It is this path which
inevitably entails compromise with imperialism and landlordism and has led to the
miserable state of affairs when the average per capita income in India comes to
around 334 rupees annually, or one rupee per day, i.e., a little more than the price of
a bottle of Coca-Cola! Further, it is futile to expect any breakthrough on the front of
population control unless revolutionary transformations are effected in the
socioeconomic structures. Apart from anything else, the proper ideological atmosphere
for birth control cannot come into being without such transformations. The CPI
comes out sharply against the efforts made by the government and the ruling class
to avoid this central issue by raising the slogan of ‘a deluge of babies.’ It also comes
out sharply against neocolonialist penetration in the form of various family planning
schemes and projects. At the same time, wherever the CPI has influence among the
masses, it does its best to persuade them to plan their families in a scientific manner.

_Mahatma Gandhi called the Indian village the very heart of Asia. The peasant remains Asia's number one citizen. After a quarter of a century of independence for India, what is the present fate of the peasant in India? What is his future?_

If India as a whole is poor, the poorest of the poor are to be found in our villages. No statistical computations can convey the wretchedness and squalor in which the overwhelming majority of our rural brothers and sisters are condemned to live. This poverty has scarcely been lessened in the twenty-five years of freedom. Inequality in the ownership of the main means of production, _i.e._, the land, is tremendous - less than three percent of the rural population owning more than thirty acres per household own thirty percent of the total land, while close to seventy-five percent of the rural population owning up to five acres per household own a little over sixteen percent of the land. The majority of India's villages do not have even guaranteed drinking water. While India's illiterates make up seventy percent of her population, it goes up to as much as eighty-five to ninety percent in the vast majority of the villages.

It would be wrong, however, to imagine that nothing has changed in India's villages since Independence. There has been a change. Capitalism has penetrated the Indian village on an extensive and growing scale. Feudal landlordism has been substantially curbed and, to a considerable extent, transformed into a specific form of capitalist landlordism. A certain degree of differentiation has developed within the peasantry itself as a result of which some twenty-six percent of the total workers in India are made up of agricultural laborers, though these are not without many semifeudal characteristics which pull them in the direction of bonded labor. An intertwining of semifeudal and capitalist modes of appropriation of the agrarian surplus, with the latter as the leading economic form, characterize the state of production relations and of property ownership in our vast countryside. And it is this bloc that comes in the way of the development of the productive forces. It is the rock on which all technological breakthroughs like the Green Revolution have foundered. Indian experience has confirmed that radical agrarian reforms, while not a sufficient condition, are a necessary condition for an upsurge in agricultural production.

But even the findings of government committees reveal that agrarian reforms cannot be implemented so long as the existing power structure in the rural areas remains intact. The Indian state has very close links with the

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landlord class, while in most areas the leadership of the ruling party is based on this class.

Hence, if India's rural areas are to experience a genuine renovation, there is no bypassing an agrarian-peasant revolution. Only a mighty upheaval from below can toss into the air and into limbo the parasitic and paralyzing system. This upheaval can be facilitated by progressive forces being in control of certain lower such as state governments - the experience of Kerala, where a Communist Chief Minister leads a left and democratic coalition proves this. This massive peasant upheaval would need for its success the formation of a broad united front of agricultural laborers, poor peasants, and middle peasants, which could draw into its fold or at least neutralize the rich peasants. It would have to concentrate its attack upon the bloc of semifeudal and capitalist landlords.

The form of this upheaval cannot be precisely predicted. It would certainly be conditioned by the specific features of the Indian situation, including the existence of parliamentary democracy and the heterogeneous class character of the ruling party.

Nor would this upheaval take place in isolation. It would be an essential and even crucial part of the national democratic revolution on the brink of which India now stands and to the accomplishment of which the CPI is dedicated.

*With the arrival in 1973 of the worldwide energy crisis, India is facing alarming problems. In 1973 you consumed 24.5 million tons of petroleum and petroleum products. Seventeen million tons were imported, mostly from Iraq and Iran, at a rate of 500 million dollars. Similar imports would cost, for 1974, 1.4 billion dollars or forty percent of your export earnings, according to the New York Times. Norman Borlaug stresses an ample petroleum supply as a key to fertilizer production. The world has already run short of much-needed fertilizer. The Arabs wanted to hurt the rich nations; it now turns out they are creating havoc in the developing lands.*

It is true that the raising of the prices of petroleum products had an adverse impact on the Indian economy, contributed to the price rise, and hurt agricultural production both through fertilizer and diesel fuel shortage.

The CPI does not, however, believe in taking a short-term view of the matter.

In the first place, the so-called energy crisis is essentially a crisis of world imperialism's most strategic sector and opens up the possibility of sharply aggravating all its contradictions. And any weakening of imperialism is to the good of India and all developing nations.
Second, the progressive oil-producing states - not confined to West Asia - are asserting their sovereign right and correcting a grievous imbalance in the international pricing system of world capitalism. Their example of unity, coordination, and courage could and should be emulated by India and other developing states in respect to other primary products.

Third, the action of the oil-producing states of the Third World has been wisely followed up by the initiative in calling a special session of the UN. At that session, the antiimperialist unity of the developing countries was once again demonstrated together with similarity of views with the Soviet Union. This opens up immense new possibilities.

Fourth, it is now clear that thanks to the blandishments and pressures of the imperialist states and the multinational corporations, the government of India opted for a wrong energy and fertilizer policy - relying too much and too soon on oil and neglecting the use of coal as the basic feedstock for some time to come. In addition, neglect of exploration for oil and incredible bungling in the generation and transmission of power have contributed to a serious power shortage and crisis in our country.

Thus, the way out lies in further developing unity and in rectifying the mistakes of the past. It is gratifying to note that the Soviet Union in the case of petroleum products and Iraq in the case of crude oil have come forward with generous offers that will considerably mitigate our difficulties.

_The world’s wheat reserves have never been so low as at present, I was told by Addeke H. Boerma of FAO. Unexpected hoarding by farmers, black marketeering, or flawed planning further undermine social discipline. Is it lack of will or leadership on the part of the Indian central government that further aggravates this critical situation?_ The food crisis in India is due to two factors, both man-made and, let it be added, made in India! There is no doubt that the rate of growth of the production of food grains is thoroughly meager and unsatisfactory - around 2.7 to 3 percent per year over the past decade in aggregate, but considerably less if wheat is removed. The result is that the per capita daily availability of food grains has remained around 445 grams for fifteen years, but with sharp fluctuations when the weather turns adverse. Thanks to the outmoded production ownership structure in the countryside, India is still a marginal agrarian economy heavily dependent on the monsoons. The point has been made earlier that this is the result, as well as one of the causes, of the entire socioeconomic system in the country as well as the character of the state power.

The second factor is the grip of the bloc of landlords, moneylenders, and
monopoly traders on the marketable surplus of food grains. It is to be noted that this bloc and their stranglehold over a vital artery of India's economic life is fully and enthusiastically supported by the top Indian industrial and commercial monopolists. It is this bloc and their enthusiastic supporters who have powerful representatives at all levels of the government and the bureaucratic apparatus. And this combination of economic and political power not only holds the nation to ransom but is desperately engaged in seeking to seize monopoly control of the state. It is this combination that sabotaged the limited measure of the state takeover of the wholesale trade in wheat in 1973 and compelled the government to abandon this altogether in 1974. And the result has been that the official \textit{wholesale} price of food grains went up by over 30 percent in 1973 and has advanced another 10 to 12 percent in the first quarter of 1974.

An important element in the critical situation is the vast hoards of ‘black’ or unaccounted money. An official commission estimated some years ago that there was a capital stock of thirty-five million rupees of black money, with an annual increment of fourteen million. The Finance Minister of India, Mr. Y.B. Chavan, said in Parliament that this black money operated a parallel economy over which the government had no control. The point, of course, is that the black money economy exercises considerable control over the government!

Thus, it is not lack of will or leadership on the part of the government that is to blame. It is the character of that will and leadership reflecting the community of and cleavage in the ruling capitalist class and its party, the Indian National Congress. Without a change in the class character of the state, the general crisis of the postindependence system in India cannot be resolved.

\textit{Madame Gandhi said not long ago, ‘We shall evolve our own type of socialism.’ What does the CPI aim at: pure socialism or moderate leftism, able to cooperate with the New Congress Party?}

The CPI's ultimate aim is the establishment of socialism and Communism. And socialism to it means the social ownership of all the main means of production and the political power of the working class, the working peasantry, and the intermediate urban strata led by the working class.

The CPI, however, is of the view that despite the winning of national freedom in 1947 and the advance along the capitalist path of development thereafter, the tasks of the national democratic revolution have not been completed in our country. We have yet to win economic independence, to
completely abolish feudal and semifeudal modes of exploitation, and to eliminate monopolistic capital structures. In other words, we have yet to traverse the stage of the revolution which prepares the transition for socialism. To put it in a nutshell, the three enemies - imperialism, landlordism, and monopoly capital - have to be defeated by the four friends: the working class, the peasantry, the urban petty bourgeoisie, and the nonmonopoly strata of the bourgeoisie. While the working class has to play the role of initiator and builder of the alliance, it also has to break the exclusive leadership of the nation by the bourgeoisie, even though its own exclusive leadership might not yet be established. The nonmonopoly strata of the bourgeoisie is a class with a dual character. On the one hand, it has objective and growing differences with the imperialists, landlords, and monopolists, and has the potential of participating in the democratic revolution. Moreover, in India it has a large mass following which not only follows but exerts pressure! On the other hand, it is an exploiting class, fears the growth of the strength of the exploited masses, and is prone to compromise with imperialism, landlordism, and monopoly capital. Thus, toward this class a dual policy of unity as well as struggle has to be adopted with the aim of dislodging it from exclusive rule and leadership as well as drawing it into the national democratic front.

The Indian state is the state of the Indian capitalist class as a whole including monopoly and nonmonopoly strata. And this is also the character of the ruling Congress. An intense struggle has gone on and continues - indeed, aggravates - between the different strata of the capitalist class to gain exclusive leadership and control over the state. Sharp policy differences and conflicts constantly erupt, leading to dramatic splits, as in 1969. Simultaneously and supervening upon this struggle proceeds the growing discontent and action of the working class and other toiling masses for radical reforms, for advance toward national democracy, and against the capitalist path of development. It is the combination and coincidence of these two struggles that is the dialectics of the development of the Indian revolutionary process.

Taking full account of the specific complexity of this process, the CPI adopts an approach of unity as well as struggle vis-à-vis the ruling Congress Party. In that party are to be found the representatives of the monopoly bourgeoisie and the landlords as well as the representatives of the nonmonopoly bourgeoisie and petty bourgeoisie. The enemies as well as the allies of the working class in the present national democratic stage of the revolution are both to be found in the Congress. The CPI takes into account two other factors. One is that since 1969 the representatives of the
nonmonopoly bourgeoisie, i.e., the Centrists, have come to acquire the leading and dominant position in the party. The most powerful representative of this stratum and this trend is Prime Minister Indira Gandhi. The second is that there are frequent ups and downs in the balance of forces within the ruling class and party. These oscillations are crucially influenced by the development of mass struggles and actions on the basis of a united front approach.

It is important to stress that the CPI attaches great importance to the fact that the Indian revolutionary process is an integral part of the world revolutionary process in which the Soviet Union and the world working-class movement play the leading role. The Indian revolutionary process develops in an epoch where the world antiimperialist forces are locked in decisive conflict with world imperialism and where the balance of forces has tilted in favor of the former. Hence, the CPI very positively appreciates and supports the antiimperialist nonaligned foreign policy of the government. Such a policy not only powerfully reinforces and forms a part of the world struggle against imperialism, but facilitates the advance of the national democratic revolutionary process in the country by pushing forward the unification of the national democratic forces. It is precisely on this account that the CPI comes out sharply against the pernicious ideas of the Maoists, which disrupt the antiimperialist democratic front both internationally and in India. The CPI has had bitter experience of the disastrous splitters' course of the Maoists, which has been of great help to the most reactionary forces in our country. On the other hand, the policy of peace and friendship pursued by the Soviet Union has been immensely beneficial not only to the nation as a whole but, above all, to the progressive and revolutionary forces in India.

The CPI has also devoted a great deal of attention to the problem of the form of the national democratic revolution. In its view there is a real possibility that the overthrow of the present capitalist state and the establishment of the national democratic state could be accomplished without armed struggle becoming the main form of struggle and without armed civil war becoming the climax of revolutionary struggle. It must be stressed that the CPI is further of the view that this is only a possibility and only one of the possibilities. It is equally possible that the working class and its allies would be unable to prevent the counterrevolutionary forces from putting the bayonet on the agenda and would have to pass from using the weapon of criticism to using the criticism of weapons. The national democratic forces would have to strive to make a reality of the possibility of peaceful transition while being ready for any sudden turn in the situation.

The possibility of peaceful transition to national democracy has arisen in
India because of the new balance of class forces on a world scale, in which the export of counterrevolution has become more difficult; because of the existence of the parliamentary democratic system; because of the broad social alliance which can be formed with the aim of establishing national democratic power; because part of the present ruling class can and must be drawn into the national democratic front as a vacillating ally of the working class. The other possibility, i.e., of a nonpeaceful transition, is also equally present because of the undoubted strength of counterrevolution, especially in different levels and organs of the existing state power, but also as far as influence over the masses is concerned with the vast intelligentsia and other intermediate strata susceptible to social demagogy as well as the pull of feudal ideology. The power of subversion, even without direct physical intervention, of the imperialist countries also makes nonpeaceful transition a definite possibility with which the national democratic forces might have to reckon.

Finally, the CPI makes three other points regarding the form of revolution in India. One is that peaceful transition is a form of revolution and not a substitute for it. This means that peaceful transition entails the main emphasis being placed on mass revolutionary movements, actions, and struggles culminating in a nationwide general strike, and simultaneous mass peasant action for land combined with a general closure of shops, offices, and markets or, as we put it, a bharat bandh combined with peasant satyagraha for land occupation. Second, that in our conditions peaceful transition will not be all that peaceful. While armed civil war may be averted, and armed struggle might not become the main form of struggle, the CPI is under no illusions that armed clashes of different forms and of varying intensity can be avoided. These would be inevitable, and we are having dress rehearsals for this even now. Third, the CPI is of the view that striving for peaceful transition is simultaneously creating the most favorable conditions for success in armed civil-war should this become inevitable.

In my conversation with him, Ambassador Tissa Wijeyeratne of Sri Lanka sounded most critical about the so-called democratic political process in India. He spoke of corruption in buying votes. How do you see the immediate future? Would a military coup be possible?

It is not enough to have only a general understanding of the trends of development. One has to concretely assess the present stage of the crisis of India.

Here it will not be enough to point to corruption - this has assumed serious proportions, but in any event, it is an epiphenomenon and not the
cause. It will not be sufficient to point to the shortage of vitamins, jobs, and seats in schools and colleges - these are the problems that have been most inadequately handled over the past quarter of a century and the real question is what is the impact of this failure on the political process.

As one sees it, what we are presently living through is a profound crisis of centrism, \textit{i.e.}, of bourgeois reformist or liberal democratic rule. The massive legislative majorities won by the Congress in 1971 and 1972 have failed to provide its rule or India with expected stability. And the reason is the complete failure of the Congress to implement its own electoral pledges whether in the matter of socioeconomic reforms or in the sphere of economic advance to self-reliance and stability. Remove Poverty was the Prime Minister's triumphal banner, but the years that followed have seen the accentuation of mass misery.

But one has to probe deeper and discover why the Congress failed to implement its own declared program. The explanation does not lie in cynicism or hypocrisy. It lies in the fact that the program to be implemented contained large elements of the program for national-democratic renewal, but the Congress leadership refused to rally the national democratic forces and sought to use that program to reestablish the lost hegemony of the national bourgeoisie and the unity of the capitalist class. The program and the instruments for its implementation were polar opposites. The centrists thought that a left program could be implemented by bringing the Right under its leadership and by curbing the Left.

On the other hand, the Left was not only sharply divided but because of the sectarian outlook of powerful segments was unable to project an alternative to the Center. It, too, failed to establish that unity between it and the Center which alone could implement a program containing many measures essential for national democratic renewal. It, too, failed to win hegemony by assuming the role of unifiers. It failed to move the Center Left and, therefore, failed to move India Left.

At the same time, enormously favorable opportunities for achieving this result were provided by the advantageous turn in international relations and the massive help offered by the Soviet Union as a result of the Brezhnev visit in October, 1973. Indo-Soviet friendship and cooperation has not only made a significant contribution to the struggle against imperialism on a global scale, but has offered unprecedented possibilities for uniting national democratic forces in the country and advancing toward economic independence. It is no accident that the most reactionary forces in our country, including those in the ruling party and the government, as well as in the administration, are sparing no effort to wreck, sabotage, and restrict the

Willem Oltmans, \textit{On Growth Two}
scope of these agreements. Nevertheless, this favorable factor objectively exists.

Another immensely encouraging factor is the radicalization of the masses on an extending scale, including the poorest strata of the rural areas. More particularly, after the 1969 split in the Congress and the tempestuous days of aid to the liberation struggle of Bangladesh, the vast toiling masses have definitely shifted to the Left in their consciousness. It is a noticeable feature of Indian political development that the working class is acting with greater unity, doggedness, and consciousness than at any time since Independence.

While taking note of these favorable factors and seeking to develop them, it is also essential not to overlook the very serious dangers to which our country is now exposed. Taking full advantage of the unprecedented mass discontent which is the natural and justified popular reaction to the crisis of the capitalist path of development, utilizing the zigzag course of the Centrists and their surrenders to reaction, the Right in India has launched a full-scale offensive to capture power. It adopts a policy of pressuring the Centrists to move Right. It seeks to create anarchy and chaos so as to destroy parliamentary democracy on the ruins of which a neocolonialist counterrevolutionary dictatorship can be installed masquerading as a so-called national government. The US imperialists and their agencies in the country are masterminding the entire operation so that they can turn India into an Indonesia or a Brazil or a Chile. The new feature of the activities of the Right reactionary forces in our country is their open turn to extraconstitutional and extraparliamentary forms of struggle. The very same people who used to accuse the Communists of preaching violence now openly declare that there is no way out except to take to the streets and bring down the Congress Government by violent means. The Right in India talks quite in the same tones as did the Nazis in Germany in the 1930's.

It is most unfortunate that many Left parties and forces in India grossly underestimate the danger of counterrevolution. The Maoists, who are now a fragmented and decimated force, proclaim that breakdown is to be welcome since in their view the present state itself is a neocolonialist and fascist state. The Communist Party (Marxist) follows a line of Left opportunism and believes that the present government, led and dominated by the Centrists, is the main enemy against whom a convergent plan of attack with the Right can be planned. The Socialist Party of India goes a step further and proposes that an open joint front should be formed with the Right to bring down the so-called Establishment. All these Left parties disagree with the view of the CPI not only on the question of the counterrevolutionary menace but also with its view that in the Congress itself influential Left forces exist and that
the Congress masses have shifted to the Left, while retaining their loyalty to the Congress.

The CPI is of the view that in the present situation the main enemy to be fought is the Right. And to fight it a broad unification of all Left and democratic forces has to be brought into being, including those in the ruling Congress. It is also of the view that to defeat the Right it is essential to curb the zigzagging of the Centrists as well as its concessions to the Right and push them to the Left. It emphatically disagrees with the view that by defense of the status quo the Right can be defeated. It is only by moving Left that the Right can be defeated, just as only by combatting and pushing back the Right that one can move Left. Hence our slogan: Move Left to Defeat the Right; Defeat the Right to Move Left. By conceding and surrendering to the Right only its appetite is whetted and the masses disoriented. By not fighting the Right, the Left cannot paralyze the vacillations of the Center nor win that essential mass momentum without which a shift to the Left cannot be achieved.

The CPI is not without a slogan of power. In its view, the struggle to achieve a shift to the Left has within its scope the objective of securing a change in the composition of the government and the bureaucracy by securing the purge of the champions of imperialism and monopoly. A purge of the Right is on the agenda. And this itself would be a stage on the way to winning a government of Left and democratic unity at the Center.

Such is the line of the CPI at this critical historical conjuncture, when India stands poised between peril and promise.

35. Georgi A. Arbatov

Georgi A. Arbatov was born in the USSR in 1923. After studying history, he attended the Moscow Institute for International Relations. Professor Arbatov is, like Dr. Gvishiani, a corresponding member of the Soviet Academy of Sciences. In 1968 he was appointed director of
the newly founded Institute for the USA. He is one of the principal advisers of the present Secretary-General of the party, Leonid Brezhnev. He is always present at summit conferences, and traveled with Mr. Brezhnev to Washington, D.C., and to former President Nixon's home in San Clemente. He also stayed with his chief at Camp David. Professor Arbatov's writings include *The Ideological Struggle in Present International Relations*, *The Nixon Doctrine*, *The USA: Modern Methods of Government*, and *The Technical Revolution and the Foreign Policy of the United States*.

What were the principal motives which led to the foundation of the Institute for the USA by the Academy of Sciences of the USSR in 1968?

In the course of the years 1960 to 1970, many new research institutes were established in this country, reflecting the general tendency to accelerate the development of the sciences, including the social sciences.

By special resolution of the General Committee of the party, passed in 1967, the social sciences were given extremely responsible tasks. This also led to the expansion of complex research regarding individual regions of the earth: The Far East, Latin America, Africa, and the USA. Naturally, the various aspects of the history, economy, geography, culture, and politics of the USA had been studied before in various academic institutions and universities. However, the need was felt for the realization of a more complex approach toward more complicated research about the United States, which also made it necessary to ensure a more coordinated and all-around study of this subject. To put it in a different way: We needed to bring specialists in the various fields of American studies into one single unit. In doing so, the Institute for the USA was founded in 1968 within the realm of the Academy of Sciences of the USSR.

You were present at summit meetings between Moscow and Washington. I am particularly referring to Party Leader Brezhnev's visit to the USA in 1973. Can you compare the summit meetings of the past, such as the meeting between Kennedy and Khrushchev in Vienna, with the negotiations which took place in Washington and San Clemente?

When we talk of concrete aspects of these summits, it is difficult for me to compare them, since I was not working directly on problems concerning the USA in 1961. However, these meetings have given rise to real and considerable shifts in the relations between both countries and have been
characterized by the signing of very important treaties and documents forming an important contribution to a lessening of international tension in general and particularly to a weakening of the threat of atomic war. The objective changes which were taking place in the world at large forcibly raised, during the early seventies, the question of a definite change from Cold War conditions to those of actual peaceful coexistence. These changes made it possible for serious and positive reversals of old policies to be achieved in many directions. At the same time it became possible to promote the question of European security and cooperation. The normalization of Soviet-American relations was in this connection extremely important. This, I feel, was the chief significance of the 1972 to 1973 summit meetings.

In 1961 the nonaligned nations passed a resolution in Belgrade which contained the decision that Nehru and Nkrumah were to go to Moscow, and Sukarno and Modibo Keita to Washington, to persuade leaders of the USSR and the USA to meet at regular intervals so as to discuss world problems and mutual cooperation in order to ease Cold War tensions. Would you say that the recent initiatives shown by the Soviet Union and the United States at last point to this direction?

Allowing for the fact that this initiative of the nonaligned nations was directed toward an easing of international tension, I can reply to your question in the affirmative. To remind ourselves of this initiative is useful for another reason, too. It underlines the importance of the normalization in the relations between the USSR and the USA - and not only for these two nations, but also for all other nations, for the cause of peace and for a healthier international situation in general.

This also underlines once more how unfounded the efforts are which are made by certain forces in representing the normalization of relations between the USSR and the USA as an ‘agreement between superpowers’ which might be detrimental to the interests of other countries. In this connection I would remind you of the important maxim contained in the document concerning the basic principles of the mutual relations between the USSR and the USA which was signed on May 29, 1972, during the first visit of President Nixon to Moscow. It stressed the fact that ‘the development of Soviet-American relations is not solely directed at their own countries and their own interests.’ It is important that we particularly bear this factor in mind because a successful battle against the threat of an atomic war requires the active efforts of all nations as well as their support in reducing tensions.

I would add to this that experience has shown that regular meetings
between the leaders of the USSR and the USA have turned out to be extremely useful for consolidating peace and normalizing the international situation. We would be very pleased if these meetings were to become a firm tradition, just like, of course, meetings held between leaders of various other countries, which likewise aim at a strengthening of peace.

Do you attach special importance to this kind of personal diplomacy at the highest level, such as the use of the hot line between Moscow and Washington?

When I was recently received by the Japanese Prime Minister, Kakuei Tanaka, in Tokyo, he pointed at a white telephone on his desk, saying it was his hot line to Nixon. Naturally, as Marxists, we attach the greatest importance to objective factors - objective tendencies and processes of an economic and social-political nature. But this does not mean that we deny the importance of activities shown by political leaders who are the heads of political movements, parties, and states. Objective factors are also obtained by the activities of these movements and parties and by national policies which in many instances, means by the activities of their leaders. In doing so, the completeness with which the objective needs of society are revealed by the activities of these leaders, their political positions, and sometimes also their personal characteristics can play a considerable part in the historical process. These general philosophic principles also determine our relation to the part that is played by politicians in foreign politics and diplomacy. When there is any question of negotiations or efforts to find mutually acceptable solutions and work out agreements, it cannot be done in any other way than as you expressed it: the personal way, which means that the realization of these matters has to take place through adequately authorized politicians and leaders. From this point of view we also appreciate the top-level meetings which take place in the present circumstances. Efforts to improve relations among countries are required at various levels and, in this sense, the creation of a mutual understanding at levels of top leadership is a very important aspect of this process: particularly when most important and most complicated political questions are involved. As far as the hot line is concerned, it is useful, even though it is only a technical auxiliary.

In this connection the effectiveness of discussions by telephone or telex under certain exceptional circumstances depends in many respects on the level of mutual understanding and confidence that has already been reached previously by those involved in earlier discussions.

It is clear that a hot line is first of all a necessity among the atomic powers.

Willem Oltmans, *On Growth Two*
Yet, analogous hot lines between Moscow on the one hand and Peking, Tokyo, or possibly even Cairo might be necessary.

The reply to your question is implicit in the question itself. The creation of all possible guarantees, including technical means such as the hot line, which aim at the prevention of the possibility - including the accidental possibility - of an atomic conflict, is very important indeed. Particularly when it concerns the great nuclear powers, especially the USSR and the USA, which have more than ninety percent of the nuclear arsenal at their disposal. The reliability of this direct communication between the capitals of the two countries was heightened by the conclusion of a special agreement between the USSR and the USA on September 30, 1971. Under this agreement the channels of direct contact between Moscow and Washington were doubled and reinforced as a result of communication through satellites.

At the same time, a well-known treaty was concluded between the two countries which provided in a number of cases direct protection against accidental or nonsanctioned use of atomic weapons. But the task of preventing an atomic war cannot remain restricted to these technical measures.

The threat of this kind of war is implicit in existing international tensions themselves or in the crisis situation, which still is smoldering in various parts of the world. During an unlimited arms race this could well lead to a nuclear confrontation. This is why the reversal from a state of cold war to a state of relaxation and peaceful coexistence which has now begun to set in is a very important development indeed. For the same reason, changing relations between the USSR and the USA, as well as the conclusion of treaties promoting normal and businesslike relations are of very great importance. In this context I would particularly like to stress the agreement to prevent an atomic war which was signed between the USSR and the USA in Washington on June 22, 1973, during the official visit of Leonid Brehznev to Washington, D.C. In accordance with this treaty the two parties agreed that they would not act in a way that a situation could arise which might lead to a dangerous sharpening of their natural relations; that they would prevent military confrontations and would exclude the possibility of an atomic war between them or between one of their countries and other nations. This agreement is a further important development and realization of the principles of peaceful coexistence in the atomic age.

In the international sphere, the Soviet Union invariably follows a constructive line in the settlement of international problems, and we consistently support the principles of peaceful coexistence of nations with different social structures. In this connection we might speak of a very extensive
range of steps which could be taken in order to promote the strengthening of peace and security among nations. This concerns both the collective steps to be taken, in which a great number of states should participate, as well as steps taken between individual nations that aim at the same time objective. Naturally, this does not exclude the improvement in telephone systems or in other contacts between capitals.

The French Minister of Foreign Affairs, Michel Jobert has cynically remarked that in spite of the new friendship between your country and the USA the rivalry between the two ‘super poker-players’ continues to exist.

A comparison of the present international situation with poker playing is completely incorrect in my opinion. And the cynicism which you mentioned is entirely out of place when discussing questions of preventing an atomic war and preserving the peace. Such comparisons are essentially incorrect because they presuppose a situation of a ‘game resulting in zero,’ a game in which one party gains as much as the other loses. On the contrary, the policy of détente reflects a situation of an entirely different nature, a situation in which all parties stand to gain, in the same way as when in a situation of tension and war all parties concerned stand to lose. When speaking about relations between the USSR and the USA, even considering the most favorable development of events, there will always be unavoidable elements of struggle, or, as you put it, of competition, side by side with the growing elements of mutual understanding and collaboration.

This is understandable. After all, the USSR and the USA represent opposing social systems. They are the two most powerful representatives of these two systems on the world stage. They cannot be otherwise than separated, not only on account of their profound differences, but also because of the serious contrasts they expose in so many different fields. However, this fact should not give rise to skepticism, let alone to cynicism, when appraising the significance of a normalization of relations between these two countries or between the two social systems - the socialist and the capitalist system, taken as a whole.

Essentially, the question that concerns us is what method will be followed in solving the objectively existing contrasts and in what channels the unavoidable struggle between the two systems will be guided. Here, various ways are open to us. One of them is the way of military confrontation, the arms race, and dangerous political crises. But there is also another way: the way of peaceful coexistence in which the rivalry between the two systems in various fields - their ideological struggle - may be combined with a many-
sided and mutually profitable collaboration. Unavoidable disagreements will be solved by negotiations and, instead of an unrestricted arms race, a course might be chosen which is directed toward a reduction of armaments and even at complete disarmament.

In this way, the question concerning the form that the struggle may take cannot be a scholastic problem of secondary importance. The difference between the various forms may mean the difference between war and peace, between a pointless waste of enormous material expenditure in the arms race and constructive rivalry which is not limited by enmity and which goes hand in hand with a wide, mutually profitable cooperation. In addition, the question is not only one of transferring the struggle which takes place in the world to a nonmilitary sphere. What is also important is that the methods and forms according to which states are to act within the nonmilitary sphere attain a useful significance. For instance: In the economic sphere the struggle could be conducted with the weapons of blockades, discrimination, and various actions directed at the economic undermining of the other party. But the same struggle could also be conducted in the form of fair competition, which is essentially constructive and does not exclude extensive international collaboration. In the same way, an ideological struggle can be conducted with the help of the entire arsenal of psychological warfare, including lies, slander, breeding distrust, hatred, and various undermining actions. But this struggle, too, could take other forms, like a discussion on the principles of two world-philosophies: their values, the basic problems of our era, and the best ways in which these problems might be solved.

Finally, even during the years of the Cold War, the struggle was conducted in many nonmilitary spheres - in the fields of economics, politics, ideologies - but always following the Cold War methods. The US arsenal, for instance, included trade restrictions, discriminating practices, psychological warfare, and undermining propaganda. If a process of positive change leaves all these tactics behind and leads to restrictions in the sphere of the military struggle, it will not mean that the cold war will be over forever. After all, this ‘war’ was called the ‘Cold War’ because it was mainly conducted in nonmilitary spheres.

In order to put a real end to the Cold War, détente and the normalization of relations have to be confirmed by abandoning those forms and methods which have been manifesting themselves. If this is done, wide prospects will be open to the USSR and the USA as well as, generally speaking, to the socialist countries on the one side and the capitalist countries on the other, in spite of all their contrasts and differences, and these prospects will lead to a reinforcement of peace and the development of genuine collaboration.

Willem Oltmans, On Growth Two
Llewellyn Thompson, former US ambassador in Moscow, said that conducting negotiations with the Soviet Union was like playing roulette: ‘There is not a single necessary connection between casting the ball and the result.’

I must admit that I am not familiar with these words of Mr. Thompson. It is hard for me to judge to what extent they were correctly quoted. As I do not know the game of roulette, I must also admit that I do not entirely understand the words which you ascribe to him. But I know very well that Ambassador Thompson was in favor of improving relations between the USSR and the USA. He believed that such an improvement was possible, and he aimed at contributing toward it.

I should like to come back once more to the subject as to whether or not you agree with some authoritative sources in Washington who assume that the personal contacts which have taken place during the last few years between Mr. Brezhnev and Richard Nixon contributed toward preventing a worsening in the relations between Moscow and Washington: for instance, during the military actions in the Middle East in October, 1973.

This question can be answered in the affirmative. The fact that the events in the Middle East in 1973 took place in a spirit of détente concerning international relations in general and in the relations between the USSR and the USA in particular, has undoubtedly contributed toward preventing an escalation of the conflict and avoiding a dangerous confrontation between the Soviet Union and the United States. There is no doubt that in a situation of international tension, a combined Soviet-American initiative would hardly have been possible, whereas today such an initiative was supported by other states and led to well-known resolutions by the UN Security Council, which ensured a cease-fire in the Middle East as well as creating favorable conditions for a peaceful settlement in this extremely explosive area. For the same reason it is very difficult for me not to agree with President Nixon, who declared in October, 1973, ‘Essentially I am of the opinion that... if it had not been for our efforts toward easing tension, a serious conflict might have flared up in the Middle East [between the USSR and the USA]. Thanks to this course such a conflict was prevented.’

Leonid Brezhnev recently said in a speech, ‘Our wish is that all the nondiscussed matters between all the people of the European continent be formulated unanimously, sincerely, wholeheartedly, and without the help of diplomacy.’ Do you think it possible that such an aim might be achieved before the year 2000, now that Europe is divided by questions such as the

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tactics and aims of détente, disarmament, restrictions in the arms race, mutual restriction of military forces, economic collaboration or, and last but not least, the approach between East and West within the European framework, while there still exist such conflicting points of view in relation to the social structure of our various societies?

To know the principles that are involved in the speech to which you are referring, made by Brezhnev at the International Congress of Peaceful Forces in Moscow in 1973, one has to quote this particular part of his speech somewhat further. It continued: ‘I mean, for instance, such principles as those concerning the immunity of the territories of all the states of Europe, the immunity of their frontiers, not using force or threats of force in the relations between the states, nonintervention in one another's internal affairs, and achieving a development in the mutual cooperation in various fields on this basis.’

It appears to me that these principles contain nothing that would make it impossible for all the states of Europe to agree upon or which might be contrary to their interests, in spite of all social, political, and ideological differences between some European countries and others. I am even prepared to say that in the present circumstances there are no acceptable alternatives to these principles. Let us put the question like this: If these are not the correct principles, what other principles could then form a basis for the policy to be followed by European powers? Would it be through territorial claims or attempts to change the existing situation by force? After all, this is the sure way that leads to war, not a cold war, but a hot war. We now can say that these principles are already in existence and that they are being given new strength and are receiving an increasingly concrete meaning. For instance: Is there not much talk about the remarkable rapprochement which has taken place during the last few years in the relations of the socialist countries with Western Europe? One only has to think of the treaties concluded by the USSR, Poland, the DDR, and Czechoslovakia with the German Federal Republic, which particularly are based on the earlier-mentioned principles. All this does not, of course, mean the resolution of the international situation in general, including that of Europe, takes place by itself, automatically as it were, without any struggle or difficulties, or without the obstinate opposition of those who are interested, for various reasons, in the existence of international tension and an increased arms race. For this reason it is necessary to overcome this opposition in order to achieve a further continuation of the process of improving our relations. For, after all, at stake are the most deeply rooted interests of all
European countries and of the entire world. In the present circumstances this task has a better chance of being realized than has ever been the case before.

A particularly important matter appears to be the one that Mr. Brezhnev brought up in the same speech, that is, when he spoke of the need for the principles governing the relations between the European states ‘to form part of the daily practice of European life and of the psychology of the European nations.’ What methods would we have to use in order to influence the thinking of Europeans, or for that matter of Soviets and Americans, to properly prepare them for the gradual acceptance of principles of mutual relations which would guarantee a harmonious development toward the year 2000?

It appears that the enormous work itself which was done during the preparation of the discussions on questions of European security and collaboration has promoted, to a certain extent, the psychology of the European nations and has, in the practice of international relations, strengthened the principles of peaceful coexistence. After all, this work involved political parties and movements, and hundreds of nongovernmental organizations.

These principles were extensively discussed on radio, television, and in the press. All this, we can say, stimulated the taking root of certain ideas and principles in the social awareness. It stimulated a new psychological climate which has made the manoeuvres of the opponents of détente on the European continent more difficult. It hardly needs to be said that new successes on the way to creating a European security system - essentially the first regional security system - in which both the socialist and capitalist countries participate, will further strengthen this new psychology of European nations, the psychology of peaceful coexistence and the strict and voluntary observance of its principles. The same can be said about the concrete steps that were taken to reinforce the collaboration between individual states, and the governmental and social organizations of Europe, the USA, and Canada in solving the general European problems such as the protection of our environment, the creation of a single energy system for Europe, and so on. It would also promote the strengthening of a new psychology of European nations and the reinforcing of principles of peaceful coexistence in the practice of external European relations. I also think that the development of economic contacts, more intensive cultural and scientific exchanges, more frequent meetings between the people working in society, the trade unions, state organizations, and of tourism; in other words, of the general sphere of continuous contacts at various levels, which are not coupled with actions.
giving rise to the suspicion of undermining activities, would also reinforce this new psychology of European nations. We welcome further contributions by the USA and Canada, as non-European powers, toward changing Europe into a continent offering peace and a mutually profitable collaboration.

*Are you of the opinion that it is possible to achieve a sincere and mutual understanding between Europe, the USSR, and the USA - industrialized countries - on the question of disarmament, which would free enormous financial resources for helping our fellow men in Asia, Africa, and Latin America in raising their living conditions?*

Yes, in my opinion it is possible to create far more understanding for these problems when states with various social systems allow themselves to be guided in their mutual relations by the principles of peaceful coexistence. The Soviet Union and other socialist countries have put forward a range of constructive proposals concerning these matters. I would remind you of one of these proposals: the one proposed by the USSR and adopted by the UN General Assembly to reduce by ten percent the military budgets of states that are permanent members of the Security Council and to spend part of these resources to assist underdeveloped countries.

*In view of your own experience with the Americans - you regularly visit the USA and your institute receives practically all the American scientific publications - are you optimistic concerning the chances of an improvement in the relations, a rapprochement, between the future generations of your country and America?*

As a scientific worker who is officially engaged in studying the USA and the Soviet-American relations, I must be realistic. I can see both the positive and negative sides of the present American policy and the trend of its future development. It seems to me that the general balance of these pros and cons give more and more rise to a certain optimism. In relations between the two countries, and in international relations as a whole, a number of important positive changes have already been achieved. As for the future, I am firmly convinced that this belongs to the relations of peaceful coexistence and not to relations appropriate to the Cold War. There is adequate evidence that Cold War relations are not only fruitless but also dangerous to the interests of all nations. The future lies in peaceful coexistence and elaborate international collaboration, and more and more importance will therefore be given to those problems which can only be solved by the combined efforts of many states. These problems are, for example, the protection of our natural environment, rational use of the energy resources of the earth and oceans,
the development of food production on a scale adequate to secure the lives of a
growing world population, and a solution of global problems such as regulating the
weather. Naturally, the processes of positive changes in international relations,
including those between the USSR and the USA, will meet with the resistance of
opponents of détente. A way will have to be found to get through this complicated
and sometimes fierce struggle. There are also quite considerable problems resulting
from the years of the Cold War, which has left its traces in the general awareness,
not only among professional politicians but also in certain social circles. In our study
of the USA, my colleagues of the institute and I can see this quite clearly. It concerns
widespread prejudices in regard to the USSR, suspicion, insufficient knowledge, and
the wish not to become familiar with the actual position and possibilities of the other
party. But in this respect changes are also taking place and a fading of old prejudices
is now under way. We may assume that this process will be accelerated in the future.
The generation which is now growing up in America has important advantages in
this respect, for it is less infected with the prejudices dating from the Cold War. This
generation is growing up in circumstances in which the futility of atomic warfare
and military solutions is more and more understood. The wave of dissatisfaction with
the war in Vietnam which got hold of the American young people at the end of the
sixties and during the early seventies is important evidence in this respect. All this
means hope for us that a new American generation will be even more interested in
strengthening peace, in the complete liquidation of all leftovers from the Cold War,
and in changing international relations on the basis of peace, coexistence, and
 colaboration.

As far as our Soviet citizens are concerned, and I include the older generation,
which bore the burdens of the Second World War - a war which demanded the lives
of twenty million of our people - it is also greatly in favor of a policy which aims at
strengthening peace and extending international cooperation. There is no doubt that
likewise the young people of the Soviet Union - our new generation - hold on to
these ideals and will be consistent supporters of improving relations between the
USSR and all other countries, including the United States of America.

Eindnoten:

   Henry Brandon.
2 During the official visit of Mr. Nixon to Moscow in the summer of 1974, observers noted that
   while the US President was referring to the importance of his personal contacts with Mr.
   Brezhnev, the Soviets, in accordance with their standard practice, deleted any such references
   on a personal basis from official statements concerning the meetings.
36. Valentin M. Berezhkov

Valentin M. Berezhkov was born in Leningrad in 1916. From 1940 to 1945 he was a member of the Foreign Service. He accompanied Foreign Minister Molotov to Berlin for negotiations with Hitler and von Ribbentrop. Berezhkov was a member of the Soviet delegation to Teheran and Dumbarton Oaks, and after the war, he was in San Francisco, when the United Nations was organized. After 1945 he concentrated on journalism. He began his career with the New Times in Moscow. In 1969 he became editor in chief of U.S.A.: Economics, Politics and Ideology, published by the Institute for the USA. His books include Diplomatic Mission to Berlin, The Teheran Conference of 1943, The Anti-Hitler Coalition, The Creation of the United Nations, and Years in Diplomatic Service.

Like the Institute for the USA of the USSR Academy of Sciences, our magazine is comparatively new. The institute is some six years old [in 1974]: Our magazine, USA, Economy, Politics, Ideology, is some four years old. The title perhaps sounds long, but it represents what we are dealing with, all the various problems. It is a monthly magazine, basically aimed at Soviet readers. Out of a circulation of 35,000, 30,000 are within the USSR. Some 2,000 copies go abroad, while another 3,000 are sold in our bookstands each month.

We began publishing in January, 1970, or some two and a half years prior
to the first major summit meetings between the leaders of the USA and the USSR. During these first years we issued a considerable amount of information about life in the United States, about social, political, and economic developments there. We explained how a major shift in attitudes and politics took place in America and why the summit meeting was possible at all, how we moved from the cold war era toward the period of détente, and how more or less normal relations between East and West, or between the US and the USSR, came about.

Of course, we explained all these events in connection with international developments, like the successes and failures of the socialist countries and the Soviet Union in many fields, the successes of national liberation movements in various areas of the world, and also successes or failures in connection with developments inside the United States, which among other things has shown us that even such a rich country cannot raise its budget indefinitely and have such enormous expenditures on war. The United States was forced to halt the war in Vietnam and begin peace talks. We also explained why we are conducting talks on the reduction and control of strategic armaments with the United States. As you probably know, the aim of our country always was and is to reduce armament expenditures and to use this money for more important and more necessary improvements. We are still hoping that we will reach an agreement between East and West on this most important problem so that we can save more money and reduce our military budget.

You are stressing détente. But the Secretary-General of NATO, my distinguished countryman Joseph Luns, warned during an interview with Newsweek, May 29, 1972, ‘The Soviets, the Communists, only mean by détente, continue war, only by other means.’ Mr. Luns is the most prominent spokesman for the Western military alliance.

In order to reply to this question we must first go back some and delve into the history of the socialist and capitalist nations. The vital question in this respect is, Are we prepared to tolerate both systems? Are we prepared to coexist? There are still well-known efforts to ‘roll back’ socialism and not to acknowledge it as an existing social force, or to consider socialism as an illegitimate child of history.

When we return for a moment to the years immediately following the great socialist revolution in the Soviet Union, we see that the policies of the capitalist nations have always been to destroy socialism. We watched these attempts during the First and Second World Wars, when the Soviet Union was still the only socialist country in the world, and when attempts were
being launched on all sides to destroy us. The Japanese attacked us. The Chinese militarians attacked us after World War One, and, of course, all the policies of Hitler Germany were in essence directed at this aim. But, as is well known, history played a joke on us all, and as the first victims of Hitler, some Western countries were wiped out, including your own, the Netherlands. Instead of creating an anti-Soviet coalition during World War Two, history engineered an anti-Hitler coalition, because the Western powers were now being threatened by Nazi imperialism. It was thus considered advisable to join the Soviet Union in the battle against Hitler.

Yes, it is interesting to note that my own country only recognized the USSR diplomatically after Hitler's attack on the Netherlands, May 10, 1940.

We in the Soviet Union not only fought World War Two for our own liberation, but we also struggled for the freedom of the Netherlands.

But when the war came to an end, we discovered that Cold War patterns stayed at the same levels.

They continued.

Yes, there was a continuation of the same anti-Soviet policies by capitalist countries. But now the USSR was no longer alone. There were other nations in Europe and Asia that had embarked on the road of socialist reconstruction. They were called ‘people's democracies.’ However, the policy of the principal Western countries, including the United States and the NATO countries, was to ‘roll back,’ i.e., destroy socialism. In order to explain why they had these policies, to justify them to their people, they continued to say, as they had been saying prior to World War Two, that the Soviet Union was threatening them. But after World War Two, of course, it was not only the USSR that was threatening them, but the entire socialist commonwealth of nations.

Your quotation by Mr. Joseph Luns follows practically the same pattern. He is simply interpreting the same old idea that we are conceiving some kind of sinister policy that threatens the West. But this is very wrong. We never had such policies. We have consistently proposed establishing normal relations with all countries and developing trade, cultural, and social contacts. We have always been in favor of this. But when could we begin? It can only start when political figures in the West understand that it is impossible to destroy socialism; that they have got to live with socialism. We were created in a capitalist world. We were once the sole socialist country in the world, which made us understand at an early stage that we had to live with capitalist countries. But the capitalist leaders looked upon us as an historical

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accident. They decided long ago that we should disappear; they did not want to live with us and work with us. But finally we have a new situation, one in which Mr. Richard Nixon and other American leaders say at last that there is parity between the Soviet Union and America. This means, in fact, that they realize that they cannot destroy us without being destroyed themselves. And so they are becoming accustomed to living with us. This is the period of history we are in now. This is the period of détente, the era of peaceful coexistence. It is not an easy period, since there are still people like Mr. Joseph Luns and others who look back, who are still devoted to the old policies, and who do not want to abandon them. They are still trying to scare people with all kinds of theories and fantasies about Communism.

*I have attended press briefings by Mr. Luns over the past years and what is striking during those sessions is Mr. Luns' continuous hammering on the subject of your expanding your fleets.*

*These statements are all in the same pattern.*

*But what can one do to change this?*

First of all it is absolutely necessary to know each other much, much better. And, above all, to know what our policies really are. In our magazine, for instance, we consider it our task to study as carefully and objectively as possible what developments in the United States are and what they mean. We study the positive movements as well as the negative ones. I think it would be useful if Western journalists would also carefully study our policies, developments in the USSR, and all proposals that the Soviet Union has made during the past years in the field of international relations.

It would, furthermore, help if foreigners would study the history of the Soviet Union more carefully. After all, during the fifty-six years of our history, we have never attacked any country, and especially not any capitalist country. There is no such precedent, although we have many, many examples in which a capitalist country has attacked a socialist country, or in which a capitalist country has attacked another capitalist country.

The second point I would like to raise is this: If we really would like to destroy the Western way of life with our military forces, then we would have had a number of opportunities immediately after World War Two. We had reached Danish territory - the island of Bornholm. But we went away. We liberated Danish territory from the Germans and gave it back to the Danish people. Or take Finland. Finland was an ally of Hitler during World War Two. They were bombing us. They were threatening Leningrad. We have discovered documents that the Finns were prepared to act together with the
Nazis to destroy Leningrad. When we had the chance to destroy them, we did not do it. We now have a treaty of friendship with Finland. We have had, as a matter of fact, very good relations with the Finns all the years following the great war and these relations should serve as an excellent example of relations between a socialist power - even a superpower - and a small capitalist country, which is above all also a neighbor.

And then our fleet, which you mentioned -

- *that Mr. Luns is always mentioning* -

All right - but you quoted him. When America has its fleets in the Mediterranean, the South China Sea, or the Indian Ocean -

- *that is considered normal.*

Exactly. That is normal, of course. America is a big power, so it is normal. However, some people do seem to accept by now military parity between the US and the USSR, and they have to get accustomed to the situation that the Soviet Union will also have its fleet wherever it seems necessary. Just recently, [April, 1974] Senator Edward M. Kennedy visited us in Moscow and addressed members of the institute. He stressed in his speech a number of times, ‘You must understand, gentlemen, that I came to you in the understanding that we must treat each other as equals.’ Mr. Kennedy repeated this theme several times. Now, if we accept this premise, we must no longer attempt to scare people by saying that the Soviet fleet is operating somewhere where American warships are also to be found. And, as you well know, Leonid Brezhnev has repeated in the name of our government that we are prepared to have talks end reach an agreement to withdraw all fleets everywhere. But this should also mean, of course, that the Americans likewise withdraw theirs.

Maybe we should chase out the US and the Russian fleets and let Dutch ships take over the high seas again, as in the seventeenth century! But, to return to our profession, journalism. The Netherlands has stationed a large number of correspondents and stringers in the United States. For years, there has been no one representing the Dutch media in Moscow. I mean, when discussing parity between the superpowers, it will be hard getting to know each other's problems if no one comes out here from our side of the fence.

I do not know why there have been no Dutch journalists stationed in Moscow.

Not only Dutch. The number of Western correspondents is most limited in
this gigantic country of yours. It is, I think, because news is still controlled in the USSR. There is not the freedom of movement that journalists are accustomed to.

The number of American correspondents now in the Soviet Union is steadily increasing and points very much to the necessity of having more information available for American readers at home. We are working on equal footing with the American journalists here. When I study the American press and see what these correspondents are writing, I am impressed by the amount of interesting information they seem to be able to collect freely. They are often doing interesting and worthwhile work. But there are some correspondents sent to us not to study our country or our policies sincerely and objectively, but to confirm the prejudices they formed about us before arriving here. Those who come here with sincere intentions will be given the normal opportunities to obtain all the information they want. Some American journalists have traveled to the remotest places in our nation, places I myself have never visited. I read their reports in the American press.

As you know, I am in Moscow accompanying the Dutch Foreign Minister, Max van der Stoel, who is here on an official visit. What struck me during his press briefings to Dutch correspondents in between meetings with Mr. Andrei Gromyko was that détente should be accompanied by a much freer exchange between individuals from the East and West; between the media, journalists, writers and so forth. This seems to be a precondition to détente as our Foreign Minister sees it.

Our position on this question is as follows. Our principle has been outlined repeatedly in the name of our government by Mr. Leonid Brezhnev. In principle we also are in favor of exchanging information, and whatever you may want. But, of course, this exchange should be allowed to take place in full accordance with the rules and laws existing and maintained in the participating countries themselves. I do not know, for instance, whether you have in the Netherlands a general ban on pornography. We have a law which prohibits pornography, so we cannot distribute freely the same material that for instance, is being circulated in Denmark. Perhaps this is an extreme example. But I want to stress that we in the Soviet Union are prepared to exchange information in accordance with the laws, habits, and traditions of our country.

Another example: We have the tradition of not exaggerating crimes. Usually, these items appear on the last pages of our newspapers. We keep this information small and limited. Sometimes the public will only read
about these events after the criminal has been sentenced by the courts. We do not have a tradition by which our newspapers headline crime or show people lying in the street in a pool of blood. You do have this custom in the West. For us, it often is a matter of violating our own traditions. We will never do this and we do not understand those who say that we too must print everything about crime and then there will be détente with the Soviet Union.

That is a little extreme.

That was only one example. What they really want is to flood us with all kinds of information. Just see how they built up the events around the so-called Soviet dissidents. We are well aware of dissidents in our country. What they write is freely reprinted and circulated in the capitalist countries. The writings of a totally unknown individual, someone who has never succeeded in publishing a single line in the Soviet Union, are eagerly read in the capitalist countries, particularly if the author is critical of the USSR. And, of course, it is called ‘literature.’ Some years ago there was such a person here. I believe Tarsis was his name. He considered himself a neo-Tolstoyan. He wrote incomprehensible prose and nobody paid the slightest attention to him. Then he was discovered by some foreign correspondent. Tarsis had begun to write stories with anti-Soviet tendencies. They were published abroad and all of a sudden Tarsis became a very important writer. He left the country, arrived in Switzerland, and after two or three years nobody ever heard again about the newly discovered literary genius. We never believed he was talented; it was Western magazines that labeled him as such.

There are more cases like that. Take Anatoli Kouznetsov. He did have some of his work published. But then he joined the small group of dissidents. He also began writing anti-Soviet articles and suddenly became famous abroad. Then he left our country as a tourist, went to London, and did not return. Now, some two years have passed and nobody has heard of Kouznetsov again. Whether he is writing, we do not know, but he has not published anything, since his writings seem to have no value to Western publishers.

We do have a lot of good and even very good writers in the Soviet Union, like Konstantin Simonov, who was just awarded the Lenin Prize for Literature in 1974. But I do not hear anyone mention Simonov in the West of late. All attention is focused on dissidents like Bukovsky and others, or people unknown in the USSR. Our most famous artists are not known abroad.

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We have spoken about these international attempts to destroy Communism and socialism and of military attacks. Now, it is realized that there is parity, whether your Secretary-General of NATO, Mr. Joseph Luns, accepts it or not. Perhaps Luns does not accept this thesis and perhaps he is still dreaming of attacking the Soviet Union or the socialist world and having a victorious war. However, there are other Western leaders who are more responsible and who accept the reality of parity. Therefore, there can no longer be an open war against Communism. Now, they must turn toward a subversive war. So they conduct ideological warfare and our enemies attempt to undermine our society and our way of life by all kinds of infiltration. These persons are not really interested in détente.

37. Adam Schaff

Professor Adam Schaff was born March 10, 1913, in Lvov, Poland. In 1935 he was graduated in law and economics from the University of Lvov. In 1935 and 1936 he continued his studies at the Ecole des Sciences Politiques in Paris. In 1941 he was graduated from the Institute of Philosophy of the Soviet Academy of Sciences in Moscow, and in 1945 received his doctorate there. After World War Two he lectured at the universities of Lodz and Warsaw. In 1951 he became a member of the Polish Academy of Sciences. Since 1964, Professor Schaff has been chairman of the board of the European Coordination Center for Social Sciences in Vienna, which was founded with the assistance of UNESCO. Some of his best-known books are: Some Problems of the Marxist Theory of Truth, Introduction to Semantics, Language and Cognition, and The Generative Grammar and the Concept of Innate Ideas. Professor Schaff advises the executive committee of the Club of Rome.
You were the first Eastern European scientist to join the Club of Rome.

Together with my Yugoslavian colleague, Dr. Leo Mates, I was the first member from Eastern Europe. Why did I become interested? Because I believe that the problématique which is being tackled by the Club of Rome will be of fundamental importance for all of mankind during the next twenty years. The problems that are now being studied will have a decisive impact on the entire development of humanity in the future. Of course, the Club of Rome is not a community of people with a unified world-outlook or with identical points of view. They are different people, and contribute opposing views. But perhaps all of them agree concerning the fundamental approach, namely that the problématique is a problématique indeed.

Still, there is a lot of criticism, even from so-called progressive Western media, that the Club of Rome is just another elite club of big industrialists and capitalists.

Yes, such so-called criticism does exist, even in circles of the left and among some of the intelligentsia. Some of this criticism was also voiced in Eastern Europe. But is is disappearing everywhere. This initial reaction is also changing in Eastern European countries, even faster among us than among some left-wing people in Western Europe. The critique you mentioned does exist, however, and at times it appears to be rather crude. Because if such criticism is made, it seems to me one should first investigate whether the ideas expressed by the Club of Rome are correct or not.

And not lambast someone as a no-good capitalist because he happens to have set up Fiat factories in Latin America.

Exactly. To what type of company a person belongs is, in this case, totally irrelevant. What some people criticized were not the fundamental concepts of the Club of Rome, but what its founders represented in society. If we were to approach things in this way, we should in reality disqualify all kinds of movements, including the Marxist movement. If you consider the founders of Marxism - Marx and Engels - they themselves were not exactly proletarians. The most important people in the international Marxist movement were persons belonging to the so-called higher classes. Never in the history of the Marxist movement did we make appraisals or put forward judgments concerning movements solely on the basis of who was the leader. Bakunin came from the aristocracy. Engels was an industrialist. If you take Lasalle, if you take all other big names, including Lenin: Lenin came from Russian nobility: all of them had backgrounds that had little or nothing to do with the so-called revolutionary class.
Considering the Club of Rome: it is not at all true what is being said, and believed at times, that the inner circle of the leadership includes only big managers of multinational companies. The truth is that there are many scientists and well-known intellectuals in the club. But, at the same time, it is also true that there are some people from the so-called managerial circles. The man who is the soul of the whole thing is Dr. Aurelio Peccei. He also happens to be one of the leaders of Fiat. But Peccei is a great humanist. He is someone who sees farther into the future than many of those who perhaps do not belong to the management of Fiat or of any other large company. In any case, I, who have been in the Communist movement now for forty-three years, am not afraid of people belonging to different classes. Neither am I afraid of people coming from other movements. I study what they have to say, and if they are doing what is right, if they make sense, and if it is correct from the point of view of certain criteria that I accept as being right for the social development -

There is a large-scale debate about growth itself. Toynbee commented not so long ago that growth would not only have to slow down, but would have to cease altogether.

I cannot say that I have a fixed or final opinion about this. Our opinions should be based on empirical research. What the Club of Rome has done in this respect is not to offer ready solutions or give fixed answers. The merit of the Club of Rome was, in Limits to Growth, to raise questions that were real life problems. No one today can avoid these questions. It is a fact that man is faced with a demographic explosion. This question should be studied forthwith. It should be established to what extent humanity can or should grow.

Personally, I am convinced that there are limits to growth from the point of view of these demographic problems alone. If people in the Third World are hearing these sounds of limits to growth, they are too often thinking only in terms of industrial growth or growth in the production of commodities. They do not always think of some of the main problems which touch their part of the world: especially the problem of runaway growth of humanity. The demographic explosion could very well become pernicious.

The second real problem - and nobody can avoid it - is pollution linked to industrial growth. The problem is to be found everywhere; it is not linked to this or that social system. It is a generalized, global problem. Nobody can find solutions by himself. The most advanced powers have been unable to find suitable answers. It will need a global approach, a global policy, a global solution.

The third large problem - we see it now all around and feel it - is the
energy crisis. At last we have discovered that there are some resources which are nonrenewable and restricted, from the point of view of their availability, to the world. Some of these resources, if further exploited, will soon be exhausted. Therefore, the problem immediately linked to that of energy is that of food, which now has likewise become of paramount importance. I do not mean to imply that man is going back to Malthus, but we should remember that our life situation today is quite different from that of the days of Malthus. There are now billions of people more in the world who are faced with the problem of the possibility or nonpossibility of producing food. These are all very real problems and no one has been offering any solutions. The first group that began the real work on the question of limits to growth was the Club of Rome. They had no other ambition than to show statistically, on a global scale, what the tendencies and directions were in which we were moving. Of course, there were plenty of criticisms of these very first global calculations, some coming from my own part of the world, the socialist countries. Some of this criticism was justified. But we in the socialist countries believe the problems of limits to growth to be real. We are becoming more and more convinced that we have to cooperate. These vital questions cannot be solved within the limitations of one particular group anymore. Not even within the limits of one big power alone. By way of résumé, I am personally convinced that here lies our real problématique. These are the questions that are extremely important for the future of mankind, and answers will not be found in launching criticism at these or other calculations. The only way out is to sit down together and to think about these problems.

I must add that my own criticism of the initial work of the Club of Rome, and in particular of the MIT study, was that they did not sufficiently take into account the existing differences in the world. They were thinking too much in a global way.

As if there really existed one world.

Exactly.

It seems as though a kind of class war between the rich northern half of the globe and the poor southern half is developing: a war over food, over resources, over energy....

Yes, this is one serious problem among others. I would say, even from the point of view of a more profound criticism of the first work done by the Club of Rome, that this question of North and South would be the very first
problem for me personally. But the reply to this matter from the Club of Rome also makes sense. They are saying the following: ‘We know it. What we did is to use a simplified way of treating global problems. Before going any deeper one must first see in a general way what is going on. Therefore, we had to treat humanity as an entity; we had to take the earth as one unit. We had to see what were the relations among the various movement among humanity, which means the demographic explosion and so on. We had to take the existing resources and see how they link together. This was all necessary in order to have an initial view of what can be done on a global scale.’ The Club of Rome is of the opinion that afterward, after these initial calculations, it will be possible to go deeper, to go into the existing differentiation, because they also realized that if one would take the statistical data for humanity as a whole, one would automatically get the answers for the problems of humanity as a whole. The Club of Rome realizes that the answers will be totally different for the rich and developed countries in comparison to the poor and developing ones. And here lies the gap between the northern and southern parts of the globe.

And there is another problem: the class question. And, I mean, the class problem even within the rich countries. For we are, after all, not only faced with the problem of differentiation between the poor and the rich countries. We also have problems of discrepancies among the populations inside each separate country. These are some of the social problems not being taken into account in *Limits to Growth*. The new research projects undertaken by the Club of Rome do. For instance, one project now in motion at the Bariloche Foundation in Argentina is considering this question in its studies of the Third World. They are even treating it as one of the main aspects of their study. These are the studies and calculations that must be pushed forward. It is certain that aside from a global problématique of growth, there are also within these global problems subclasses and subproblems that touch different continents, different groups of countries, or even different classes inside these countries. The whole thing is much more complicated than could be shown simultaneously in a global way on the basis of the statistical analysis used by the original MIT group.

*I wonder how there could ever arise the kind of solidarity among all peoples, which seems so needed if one is to discuss these problems without always resorting to competition in political or social ideals.*

Well, that is a very difficult question. Even more than that, it touches upon the most subtle and delicate problems linked to the political and social
situation in our present-day world. If we take humanity as a whole, and consider our planning on a global basis, we cannot ignore it. This question even becomes the main problem in the Third World. If limiting growth meant simply economic or industrial growth, or engineering a halt to the demographic explosion, I think this would represent both a utopian and an unjust way of thinking. Apart from the fact that the poor masses in many developing nations cannot easily conceive the worldwide implications of the baby boom, it would be totally impossible to make even a beginning in restricting the demographic explosion everywhere without simultaneously changing the existing social conditions in these parts of the world. In order to make any progress in this direction, we would have to make poor nations grow richer. It would be the only way. We know it from history. In any case, it would be necessary to reduce the demographic explosion in a sensible way. We do not have much of a demographic problem in most advanced nations. On the contrary, they are often already diminishing their populations. The real problem of demography comes from two-thirds of humanity, from the people who suffer from hunger and miserable poverty. By merely postulating these matters, we will not advance the cause of restricting population. Here lies the weak point in the Limits to Growth study. They end their booklet by announcing, ‘Let us stop the population explosion.’ One cannot achieve this by simply announcing it must be done. There are many many other factors involved. It is purely utopian. Secondly, I think such a statement is unjust. And it is here that we find some of the harshest opposition to the activities of the Club of Rome. Because the Third World is saying the following, and they are right: ‘If we were to stop economic growth today, it would mean that we would be letting this unjust situation in the world rest as it is. It would mean that our people, who are suffering hunger and dismal poverty, would continue to suffer.’ The Third World is right in taking this attitude. Most people in the world do not seem to realize that humanity is chronically suffering from hunger. If the developing nations stopped growing, it would in effect mean that one-third of humanity, in the developed nations, would continue to flourish, to be rich, and to live wastefully. No one will accept this status quo anymore. And if this is not understood in time, it could well lead to the beginning of a class fight between the poor and the rich; not only the poor and the rich of different social origin or classes within nations, but between different lands. This could be the most disastrous development in the history of mankind. Therefore, entering deeper into the problématique of limits to growth, the entire spectrum of social relations on an international scale must be taken into account. There are already signs that the Club of Rome is doing exactly
that. Their recent document, *The New Threshold*, brings the discussion of this problem into their deliberations and projects. No one can demand of the Club of Rome that they become a new revolutionary international. That would likewise be utopian.

Aggression could very well become a way for the poor to improve their miserable lot, while even the rich may soon be fighting over diminishing resources.

Surely. Not only can we not exclude aggression, but we logically must include aggression in our calculi measuring our present and future situation. There is however another aspect to this question which is particularly well understood by those often-despised global managers. They realize that even if the poor would agree to remain poor and accept their miserable lot, would continue to die of hunger and live by that gap between rich and poor, that even under those unimaginable circumstances the world economy would face a deadly danger. Because our planetary economy is based at an ever-increasing pace on global relations. It simply could not exclude one part or one region of the world that had decided to remain underdeveloped and poor. All kinds of equivalent balances exist in the world economy. All economists - including bourgeois economists, who follow the theories of Keynes and others - agree on this one point: that the situation I just described is an impossibility. Then, on top of this comes the certain opposition from the people who cannot and will not take for granted that they will continue to starve to death, and who will certainly not accept the deteriorating situation in their lands. They are certainly going to fight. We have already seen a first signal of what is to come. It was a very unfortunate signal, one not too advantageous for the developing countries themselves: oil.

Developing countries are mostly producers of various raw materials. Many of these are restricted. They will start a fight on an economic basis, and could further develop a confrontation on a political level. We have already seen the first signs on the wall. Phenomena such as terrorism have appeared. The entire world could be turned into a terrorist battlefield. This would mean unimaginable danger to the survival of all normal life on earth. Terrorism has so far been restricted to certain areas. Nevertheless, it is spreading. What could be the result of terrorist moves by frustrated or desperate people? If we do not change the situation these developments may well become worse.

*It was interesting to listen to President Houari Boumédiene of Algeria*
during the recent United Nations conference on natural resources, when he appealed not to the US or to the USSR, but to Europe for guidance. He must have meant all of Europe; the Europe stretching from Lisbon to the Urals, envisaged by de Gaulle.

I cannot answer this question for President Boumédiene. However, I do not think that anybody speaking of Europe today has only Western Europe in mind. Europe is Western and Eastern Europe. I happen to think that Europe could contribute considerably to reconciliation in the world and could help find answers to our global problems. I am a Pole. Not only do I come from Poland, but I am a Marxist. I belong to the Communist movement. I am deeply convinced that the countries that are basing their activities on Marxism could contribute to the solution of these problems. This includes finding ways to solve general European problems together. But for the moment, I am afraid we are still very far from this kind of cooperation.

Once upon a time the United States and the Soviet Union found themselves allies in the struggle against Hitler. Is it not possible that Eastern and Western Europe will find each other in our common struggle against hunger and poverty in the world?

This is a possibility. In my opinion, it is a necessity. Either we find a way to work together to find solutions in close cooperation, or it simply means world catastrophe. Therefore, I am hopeful and optimistic enough to say that this cooperation will be found. But, on the other hand, let me also introduce a note of skepticism and caution. It was easier to fight a common enemy like Nazi Germany than to find a common ground to fight problems such as world poverty. We in the socialist countries have a program. We say, ‘Let us change the social structure of the world. Let us change from private ownership to collectively owned social ownership.’ I personally think that it would be easier to find solutions on this basis. But at the same time I am skeptical enough to understand that just because it would be easier does not mean that people would necessarily accept these solutions. However, I should add that on the basis of our knowledge of history, perhaps not always, but in the majority of events, if humanity needed to meet an emergency, it often found a way, simply because it was necessary to do so in order to survive.

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38. Yojiro Hayashi

Professor Hayashi was born July 27, 1916, in Japan. He was graduated in electrotechnics at the Technological Institute in Tokyo. In 1947 he was adviser for technical problems to the Prime Minister. In 1962 he was adviser for economic planning to the General Planning Agency. In 1964 he became president of the Institute for Economic Research of Japan. Professor Hayashi also lectured at the Technological Institute. At present, he is president of the Japanese Institute for Future Technology. Among his books are: *Visible and Invisible Innovation - The Change of Human Consciousness Toward a Multi-channel Society, The Heterogenication of a Homogeneous Society and the Homogenization of a Heterogeneous Society,* and *Human Welfare and Technological Innovation.*

*Are you optimistic about the future of Japanese society?*

This question is a very difficult one. We would have to establish many conditions. But basically, I am an optimist.

*Do you believe that scientists should be responsible to the people as a whole these days?*

Of course, but before I fully respond to this question, I would like to define the means, the needs of technocrats and scientists. Up till now, so-called experts made many mistakes. But in the future we must develop a new kind of technology, the so-called soft science and soft technology.

*Albert Szent-Györgyi explained to me that whereas in the past scientists or mankind could afford mistakes, with the present A arms the slightest mistake would be fatal. But what do you mean by soft sciences - sociology? psychology? behaviorism?*

A closer connection between the sciences and human beings. The common people, the masses, the consciousness of human beings, that is what we are concerned with here. Needless to say, in a society of human beings we
are faced with countless individuals. Therefore, to speak of a consciousness of human beings is not that simple.

And we still know practically nothing about it.

Until today, technology and science have been far too rigid in relation to the consciousness of human beings. We must develop much more in this direction. We have developed the computer and then, for the utilization of the computer, we have developed software sciences. For the other areas we have produced many hardware sciences, which led to the invention of the airplane, the automobile, oil tankers, and so forth. For the use of this hardware we also developed many different softwares. But compared to the development of the hardware, the development of software is most unequal. What we must develop urgently are the so-called societal software sciences.

This means the social sciences, knowledge about the human psyche or the brain.

Yes. I call this social software.

Margaret Mead calls our era ‘the decade of the brain,’ as she told me in the first volume of interviews in On Growth. In our part of the world, psychiatrists such as José M. Delgado are doing revolutionary research on the working of the brain. Is there a similar interest in Japan?

You are right, but I don't mean psychiatry in the medical sense. We must set up new studies to scientifically pursue the relationship between the consciousness of the human being and the overall system of society.

You will agree, no doubt, that it is the youths of the world who will have to really develop these software sciences. My initial impression is that the young in Japan mistrust elder people.

Our youths are not so eccentric as they might seem at first glance. They have a lot of commonsense. It is, of course, always the young people who create a new society. The behavior and the consciousness of youngsters is the symbol of a future society. Therefore, we should first of all observe the behavior of youth. They are the indicators of a future society.

How would they differ from bygone generations? They are undoubtedly much more open and frank and far less traditionally inclined. Could a future Japanese society be, to use Chie Nakane's expression, less vertical and more horizontal?

In our future Japanese society, the human boundaries will be changed.

Willem Oltmans, On Growth Two
The present boundary is only a partial one. There are, for example, many differences between Japan and the United States, between America and France, or between Holland and India. In my opinion, in a future planetary society the differences between the younger generations and their elders will be much wider than the differences between the new generations of youths everywhere.

*There will be more equality among men?*

Yes. For example, take at random fifteen young people in the United States, fifteen people in Japan, fifteen people in India. They are not so different anymore. But take fifteen parents and their children within our own society in Japan. The gap between teen-agers and parents is enormous.

*You chose fifteen children from the United States, Japan, and India. What about fifteen youths from the Soviet Union, Nigeria, or Chile?*

I spoke on the trend of changes in our day. At the present stage, in the case of choosing fifteen children from the Soviet Union, Nigeria, or Chile, the difference among them may be enormous. However, what I want to say is that in the future, the gap between generations within the Soviet Union, Nigeria, or in Chile will increase much more than the differences in nationality between the Soviet Union, Nigeria, and Chile.

*What you are saying sounds rather hopeful, since it would mean a future world with fewer cultural and psychological differences among people.*

I believe that in the future to organize the world on a planetary scale will be much easier than nowadays because there will be fewer obstacles and differences between people.

*Then, each year it will become easier, and some day the world will be one big family.*

One of the main obstacles in our time is narrow nationalism. In a future society globalization will develop much more than nowadays. Today, for the young in Japan, foreign nations already seem much less strange and alien than to their own parents.

Even if the young person is unable to speak a foreign language, or even if he or she has not yet traveled abroad, the rest of the world does not seem that enigmatic anymore.

*Perhaps a future planetary society would make world government a possibility.*
Undoubtedly, it will become much easier to reach this ideal. For example, look at the empty discussions at the United Nations in New York every day. Listen when they discuss, for example, the improvements of their mutual relations, or better between the northern and the southern nations. Even we, here in Japan, have many disagreements among ourselves we don't seem to be able to solve.

*Why?*

Narrow nationalism and regionalism have always been the barrier. But in a future human society, this barrier will undoubtedly disappear.

*This would bring us to a global society, the way the Club of Rome tries to see it now.*

Yes. In our society, in Japan, the younger generation is not possessed by the kind of patriotism believed by their parents anymore. Actually, they still harbor patriotism, but its pattern is changed.

*It is more in harmony with the rest of mankind.*

Indeed. Many years ago, for instance, during the Meiji Era, when intense patriotism prevailed in Japan, we often killed other people in other lands. Nowadays, the young refuse to fight or to wage war. Our young men in Japan don't consider invading other lands patriotism anymore. They would rather contribute their energies to mankind or to society. After all, this could also very well be an aim of patriotism! I believe that patriotism always changes with the changing conditions within society.

*Like Kamikaze.*

Yes.

*But when the promising young writer, Yukio Mishima, killed himself, it seemed, as if he still harbored old ideas.*

But the majority of the younger generation of Japan did not agree with Mishima.

*They felt his actions were too radical? Like founding his own fascist private ‘army?’*  
I don't think that it is suitable to relate Mishima's case to patriotism. It was a question of Mishima's esthetics, not his patriotism. I don't think we should discuss it here.
How do you see the development of future relations between the younger generations of your neighbor, China, brainwashed through an authoritarian dictatorship, and those youngsters of Japan, growing up in a freewheeling democratic society?

I think that patterns in Chinese society will become more moderate. Let us look at the Soviet Union. Conditions within the USSR have changed considerably compared to forty or fifty years ago. The history of the People's Republic of China is relatively short compared to that of the Soviet Union. In ten or twenty years from now, these conditions will become moderate.

Futurologist Herman Kahn believes that Japan will one day be a beautiful garden.

As you know, I am also basically an optimist. But I still feel that Kahn's views lack the spirit of the Japanese.

He did not comprehend the true roots of the Japanese tree?

I think he is guided far too much by Western logic. For example, when he speaks of the evaluation of the GNP he is not clear. Does he mean the GNP as symbol of prosperity? After all, prosperity is only one indicator. We in Japan have discovered different indicators for prosperity.

Can you name one?

In order to do that it is necessary to know concretely what is a desirable life and a desirable environment for each individual. Each person might harbor different wishes, but we could find some common ground nevertheless. Or we might detect some common relation in the function between consciousness and living conditions. We may find a way to describe the quality of life quantitatively.

In other words, the question would be how to achieve a mathematical calculation on the quality of life acceptable to most. Are you using computers in these studies?

Yes. But, of course, this is extremely difficult. Let me ask the question, What is happiness for the Japanese?

I thought the Japanese never used the word happiness. Life is never perfect to you Japanese, is it?

Happiness in any case is not the Gross National Product. It would be hardly sufficient.
But not for Herman Kahn or for America.
Maybe. But we Japanese need more.

When will your studies in these fields be ready for us to read?
I don't know yet. I conduct the work in cooperation with New York State University and the East-West Center in Hawaii.

But you will acknowledge, perhaps, that for foreigners it is extremely difficult to come close to understanding Japan.
Herman Kahn understands one half of the Japanese. The other half is terra incognita for him. I grant it is difficult to understand the Japanese, perhaps more difficult than any other people. Our society differs so much from other nations.

That is what your history did to you.
It is extremely difficult for foreigners who visit us to discover what is most typically Japanese. For instance, you met with our Prime Minister, Kakuei Tanaka, a bank president, and the head of our space industry, but they did not express, in their conversation, typical Japanese views. It probably eluded you altogether, but the decision-making process in Japanese society is performed by the people themselves, as a whole. It might seem that the Prime Minister makes decisions, but this is not so.

Mr. Tanaka just returned from Moscow, where he initiated a new form of Japanese diplomacy. He was rather blunt in his conversations with Mr. Leonid Brezhnev, and the latter, according to press reports, banged the table, which seems a new departure in diplomatic conduct for a Japanese Prime Minister. Would you say this is the result of the popular decision-making of the Japanese people or are we faced here with the particular temperament of one man?
In the case of Prime Minister Tanaka, we are faced with a very strong personality who succeeds in running affairs in his own way. On the other hand, the responses from the public to his actions were extremely strong. Mr. Sato, our former Prime Minister, might have given the appearance of the incarnation of incompetence, but he was a politician who used skilfully the advantages of public decision-making. As a result, he succeeded in administering the affairs of state for eight long years.

Would you say Mr. Tanaka represents more a reflection of a new generation
in Japan? Perhaps he is a Prime Minister in the line of Willy Brandt or Lee Kuan Yew.

I do not think so. Prime Minister Tanaka is not so popular among the young generation in Japan. He is too patriotic for them and not sufficiently internationally minded.

I would like to ask you a last question about your young people. I spoke to students at Hitotsubashi University who organized a teach-in on future economic growth. I was deeply impressed by the questions raised by your students, as well as by the length of the time they set aside to ask them. Later, a deputation of seven students came to the Imperial Hotel to have further discussions until the middle of the night. My impression was that your students absorb information like sponges.

Fundamentally, you are quite right. However, based on my own experiences, I would like to indicate that our youths who are called bright students often lack curiosity and those who do poorly in school are full of curiosity.

39. Yokei Kono

Deputy Minister for Education Yokei Kono was named by Time magazine among the foremost 150 future leaders of the world. He was born in Tokyo in 1937 and studied at Waseda University, Tokyo, and at Stanford University. He is a member of the House of Deputies for the Liberal Democratic Party, the party of Premier Tanaka. He is also vice-chairman of the Diet Policy Committee and has been involved for some time in educational problems. He became Deputy Minister of Education in the Tanaka Cabinet in 1971. Students at Hitotsubashi University, Yasuyuki Maruyama and his colleagues, drew the attention
of the author to Yokei Kono. This conversation took place at the Ministry of Education in Tokyo.

*The Club of Rome recently met in Tokyo to study the future of mankind. Its members concluded that the world is confronted not only by material problems, but to a very large extent by sociopolitical and psychological ones. While scientists are seriously considering our future, what is the role of politicians in this context?*

As a statesman, I believe that we should devise and implement policies that shift the focus from economic growth or materialistic approaches, to the quality of life. This has too long remained a lip service on the part of politicians. Economic progress and subsequent urbanization are largely responsible for new social and environmental problems. The political process should be adapted to meet these new needs. It is the task of politicians to provide physical conditions by means of legislation upon which people can lead a stable and sound psychological life. The psychological aspects of people have been the most deeply affected in contemporary society but have not been given proper attention. To attain such a goal, politicians must become much more sensitive to the voice of the people as well as responsive to the findings of such groups as the Club of Rome in considering new policies and measures conducive to a better environment.

Also, though politics should not get into the spiritual aspect of people, we should take into account a changing value system, especially in this country, for two value-orientations now coexist: group orientation based on traditional and prewar values, and more individually oriented values among the postwar generations, influenced by Western culture and predominantly by the American system of education, which we have used for the last quarter of century. Young people are more independent and individualistic. This is in itself a good thing, I think. At the same time, however, it seems to me that they are becoming increasingly a ‘lonely crowd’ and so looking for a community with which they can identify themselves. Without it, I do not think that they are happy and psychologically satisfied no matter how free and materially wealthy they may be.

*Would you say then that the shift in Japan is from a predominantly group orientation toward a more individual orientation?*

Well, what I mean to say is that people seem to be seeking a harmony
between the old and the new; that is, between group and individual orientations. They are taking advantage of the wisdom of the traditional Japanese values and modern thinking. This does not mean people are going back to the old value system, or that they are completely adapted to individualism in the Western sense.

But what about the young students, such as those I met at Hitotsubashi University, who suggested I interview you? One sees blue jeans everywhere at your schools, but how deep does Westernization go?

Of course, at present, as you say, the young Japanese look Westernized. They look happy, carefree, and independent. However, this does not prove that Westernization has fundamentally changed their way of thinking or mentality. Their value orientation is not necessarily based on individualism in terms of the general notion in Europe and the United States. Their feelings are somewhat confused in this rapidly changing society. They are materially rich and better educated, yet they are increasingly dissatisfied with life. This was demonstrated in the recent national survey which compared them with the youth of other parts of the world. In a sense, they are struggling with the so-called identity issue. While they strive for self-realization, I think they wish to have a sense of community. They appreciate cohesion with their friends or family. Nevertheless, I would not say they want to return to the old family system. That's why I said that today's Japanese youth are implicitly trying to harmonize Western individualism and the traditional wisdom of the group. This to me is a great human experiment and significant to us and to people elsewhere.

It seems that the leadership in China has succeeded in manipulating Chinese youth. This could be called nationwide brainwashing. While no one would want to follow that example, some form of leadership of the young seems needed in such a society as Japan.

I do not believe that manipulation should be employed in the political education of the young. De Gaulle once tried to educate young people by participation in the political processes. I very much respect this kind of method. But in the future, I believe, politics by participation, in terms of de Gaulle's concept, will be replaced by politics based on joint programming or joint planning. Politicians and the nation itself need to set up mechanisms to work together in making plans or working out problems and programs.

Are you speaking of other continents as Africa or Latin America?

That is right. Since stages of political development differ, processes will
be necessarily varied. Each should not impose its pace upon the other. However, international cooperation should be enhanced in these common endeavors.

It is necessary in this country that politicians and the people communicate and work together more closely. Politicians tend to fail in grasping the real needs of the people, who in turn no longer look to politics for solutions. Such a discrepancy is detrimental and must be overcome. Statesmen should first take initiatives to change such a vicious cycle, and the people, too, need to develop new, positive attitudes and willingly cooperate with the government in projecting a better future society. Establishing a closer link between the people and politics by means of communication, feedback, and interactions is the only way to find a desirable course of action for tomorrow. I hope similar processes will take place internationally.

You yourself belong to the new generation. Do you feel affinity with the young?

Yes, I do. And I think we share the view that the future of Japan depends entirely on the young men and women. Therefore, it is all the more important for political leaders to leave sufficient room for them to have multiple options and decisions about their own future. We have tried to develop this country in terms of politics, economics, and other areas affecting national life. Sooner or later, our generation's time will be over and those who are at school now will take our places. More room should be set aside for them to select. We are responsible for preparing them to make their own decisions in order to forge a better society. Here, the role of education becomes extremely important. This kind of education is not yet being done.

Do you believe that more young men should be accepted into the government in order to train them in assuming responsibilities?

Yes. When I said that education is important, I implied that both intellectual training within the educational institutions and more practical education outside are needed. The present system overemphasizes education aimed at stimulating conceptual thinking. Education aimed at enriching spirituality, the cultivation of sentiments, and career-oriented practical training is largely neglected. We need to educate youth to become mature and responsible adults. Of course, this can be done outside of formal education. Political education is in this category. It is another task for politicians to train young people in such a way that they can make their decisions responsibly.
Compared to most of your neighbors, your nation is fabulously rich. But the behavior of Japanese businessmen has been criticized. Your Prime Minister became a virtual prisoner in the Presidential Palace when he visited Indonesia. It seems that it will be the task of your youth to improve Japan's image.

I am indeed shocked by the seriousness of this problem. We must realize that such behavior in Southeast Asia is shortsighted and extremely harmful to both sides in the long run. My only hope is that we can turn it into a blessing in disguise in the sense that we would correct such practices and cooperate fully with developing nations.

Again, education should be carried out in such a way that international understanding will be cultivated among the young students. With proper education, they will assume more responsibility and become enlightened leaders of this country. Also, we need to respect and understand other cultures through promotion of international communication and cultural exchange. So far, our country has not sufficiently contributed to international understanding programs. Both the public and the private sectors should expand and qualitatively improve various exchange programs.

Would you say that continued economic growth would also be needed to improve education in all fields?

I have to admit that economic growth as rapid and high as ours impedes the development of educational programs and has distorted our educational patterns. For instance, a great majority of the educational issues we are facing today come from urbanization, which was brought about by economic growth.

Besides, economic growth does not necessarily mean an increase in educational investment. In fact, our national education budget, which used to be one of the highest in the world, now ranks as one of the lowest among the advanced industrial societies in terms of GNP. So far, we have put too much emphasis on tying education to the concept of economics. As a result of economic growth, industries have tried to hire as many people as possible. I mean, of course, that they are trying to recruit personnel with an educational background, preferably university graduates. But now is the time to look at education as a vital instrument of social development, not of economic development.

I believe in lifelong education, which will be more and more important in a postindustrial society. Continuing education will help people enrich the quality of life and will help the country to maintain its overall national capability, which will indirectly benefit economic development.
Are you optimistic about the future?

I have optimistic views about the future of the world as a whole, for I believe in man's intrinsic wisdom. Otherwise, I would not have become a politician. Man has failed in one regard, and created the global and environmental crisis. Now we have come to realize that we have to overcome this crisis by international cooperation. There are a number of international joint research programs and action programs seeking solutions to the common problems of mankind.

However, I am not as optimistic as Dennis Gabor, to the extent of believing in the perfectibility of man. That is why education must be emphasized: to enable human wisdom or prudent work to find ways and means to make this world a more worthwhile place to live in. Education at school is not enough. Well-coordinated educational programs at home, in the school, and in society must be developed to educate the young to be equipped with such wisdom. I can see great hope for the future only in education.

40. Eshan Naraghi

Eshan Naraghi was born on September 13, 1926, in Iran. He was graduated in economics from the University of Geneva in 1947. In 1952 he obtained his doctorate in sociology at the same university. After working in Iran in various capacities, he obtained a second doctorate in sociology, this time at the Sorbonne. He lectured at the University of Teheran from 1957 to 1967. In 1968 he joined the UNESCO in Paris where he became director of youth activities in 1969. His publications include Contribution méthodologique a l'étude de population dans les pays à statistiques incomplètes and Sciences sociales et leur développement historique.
I understand that UNESCO considers it one of its aims to maintain and promote the dialogue between young people and the world. This was stated in the brochure Partnership with Youth, published in 1969. Has any progress been made in this sector during the last five years?

To begin with, we have learned to understand that the problems of youth cannot be separated from those of the rest of society. Questions such as upbringing, education, science, culture, and politics should be seen in their social context. There is no such thing as a youth problem which stands apart from society itself.

But Valentina Tereshkova of the Soviet Union, for instance, says that young people in her country are made aware from their earliest days that Soviet society is in urgent need of its young people. Children are taught a sense of purpose. You are therefore probably not speaking about the situation in the socialist countries.

I will come back to this later. UNESCO has understood that the problems of youth concern the entire social system. In 1970, therefore, we entered a new period. We are now treating questions concerning our youth as a social problem. The young people - and it is very important that you understand this - are associated with all the dimensions of social and political life. When we organize symposiums, such as the one in July, 1974, which concerned the place of the artist in our society, a number of young artists participated in them.

So you are trying to be representative of everyone?

To the extent to which this is possible. We have done the same at conferences with scientists concerning the world crisis and problems of the environment. The report made by the Club of Rome was discussed in detail here.

Do you mean to say that the UNESCO organized a meeting at which the Club of Rome problems were discussed?

Young people were among those who were most worried about the future of ecology. We invited them, and very interesting discussions took place. The report of these debates made a great impression upon circles that occupy themselves with these problems.

So this report was a forerunner of the MIT report.

Indeed it was. During the Environmental Conference in Stockholm in 1972 we organized a parallel conference in order to give young people a
chance to express their viewpoints in these matters as well. We are now doing the same in the field of education; we are doing preparatory work on educational matters all over the world. Young people from all countries have discussed these questions in detail under the auspices of the UNESCO, and the debates were recorded in a brochure entitled *Apprendre à être* [Learning to be].

*During the sixties people in the United States believed that the schools and universities would form the avant-garde in involving youth in social problems or in guiding young people toward accepting more responsibility toward society as a whole. Not much has come out of this.*

Let me first reply to your question concerning the socialist countries. We believe that in the developed countries, the industrialized and capitalist countries, a number of spontaneous reactions and actions are shown by the young people, which can often not be foreseen. These are spontaneous manifestations which one should not try to compress into any preconceived plan, and whose direction one should not try to program in advance. For that matter, we believe that what characterizes the youth movement in the socialist countries today is becoming more and more the hesitation or refusal on the part of young people to belong to an organization. The young are more and more refusing to identify themselves with a state organization.

*And in China?*

That is a different matter. China is a world apart from the rest. The Chinese appear to be satisfied with themselves. Their world is so different that we might say their society has nothing to do with the rest of the world.

*Are the young people in China consulted at all?*

Their is a world in evolution, in revolution, and undergoing a process of permanent change. It is better to leave that development alone for a few years. Afterward it will be possible to obtain a clearer picture. At this moment we simply do not know enough about the situation in China. What is easier for us to judge are the young people in the developed countries. What are they rebelling against? They are rising up against a system of dehumanization. They think that the system does not meet their wishes. I might say, as we express this in sociology, that a kind of tug-of-war has developed between society and its establishment and its culture, as it has evolved with all its ideas. The social system does not agree with the ideas which are now growing. These ideas are expressed by the young. They wish
to progress beyond what they feel to be a repressive system. That is how a
confrontation arises between both groups. Why has an important part of the protest
come from the schools and universities in the countries of the West? Because the
social system still remains very inflexible, particularly in those countries. The essence
of education, including at the universities, is still based on old and outdated values.
The young certainly feel that there is something wrong, and that the system no longer
agrees with the evolutions taking place in the world. Fierce reactions and revolts are
the result. One might say that the young people in the Western countries, perhaps in
a confused, primitive, or even slightly unconscious way, express the imperfections
of their society. When you read certain authors of the fifties and study their ideas
about Western society, you find, for instance, in the writings of American sociologist
David Riesman or in those of the Frenchman, Jacques Ellul, the same revolt against
mechanization and against the machine leading a life of its own.

The French sociologist, Georges Friedman, spoke already in those days of the
mechanization of man, the chopping up of labor as a result of mechanization and,
consequently, the chopping up of people's personalities. This was said as far back
as twenty years ago. In its totality, human society has become too mechanized. During
the fifties, Friedman spoke of a solitary society, the solitary mass, lonely men
surrounded by machines. Suddenly the young people of the sixties expressed the
same ideas in a natural way in an evolution which might almost be called
revolutionary. But the public at large did not see this. For society first needed the
advent of the struggle of the young to understand that deep feelings of dissatisfaction
prevailed in Western society. The thinkers and sociologists had already felt this.
Mechanization was excessive. The large complexes, the multinational industries,
these were developments which were bound to lead to a reaction some day. In the
West the young are revolting against a certain indirect but very perfidious oppression.
Not oppression by a police apparatus, but by the mechanized complex of selection.

We have been talking all this time about the superrich countries. But, while I have
been listening to you, I have been thinking of the hundreds of millions of illiterate
and very poor people in the Third World. Their problems are not expressed here.
Who is listening to them?

Let us not for heaven's sake call them the 'silent young.' In the underdeveloped
countries there are now a great number of young people who have attended schools
but who are unemployed and who will have problems in finding jobs in the future.
Egypt is an example. \(^1\)
During my last trip to India, Mohit Sen spoke to me of the disastrous situation in this part of the world. Indeed, it is disastrous. In these countries we have badly adapted schools which deform people instead of forming them. Take the young in Africa. The present educational system deforms the young people. They are taken from the countryside and thrown together in large cities, where there is an accumulation of the unemployed, and criminality results.

This is precisely what is happening in India according to Mohit Sen.

I was recently at a world congress about the problems of badly adjusted children. Everyone agreed that in the developing countries the problems of juvenile delinquency are increasing. One person even thought that the growth of criminality in the poor countries was proportionate to the increase in the number of cars. In one town there were a million cars at one time, and when their number had increased to two million a year later, the number of young delinquents in the same town had also doubled. This means that there is a form of barbarism taking place. There are young people without guidance, without protection, in a so-called modern civilization. Development that is left to its own fate without any kind of plan is, after all, a form of barbarism. Young people abandoned by the surrounding world, without guidance, without culture, decultured, anticultural, without any assistance from society means, after all, a situation which leads to a human catastrophe. Young people are victims. And when the young protest or defend themselves, they often become the victims, physically or intellectually, of others. That is how you get young people protesting in matters of politics and then immediately becoming the objects of witch-hunts. The future of the world will therefore depend on the way in which governments succeed in creating an environment or a political and social situation in their countries in which the urgent wishes of the young can be met. This is the problem of the future, the problem of the young in the developing countries, particularly the dangerous situation of the young in the cities of those countries. The young farmers who remain in the countryside are relatively well protected, by traditions and family life, for example. This in spite of the prevailing poverty, ignorance, and illiteracy. The unprotected young are those in the cities. Here there is no structure. And no one to fall back on. The young in the cities are not guided into entering the social system. This is how you get criminality and vandalism. Young people, moving to the cities without being given any possibility to take part in the social processes, become quarrelsome or revolutionary. This development is taking on seri-
ous dimensions all over the world. In 1972 alone, fifty universities were closed for this reason all over the world.

In one of your speeches you said you had the feeling that a kind of brotherhood was growing up among mankind. But how will the reconciliation take place between the enormous cultural and psychological differences between the young people in the world? After all, Japanese youth function differently from those in Africa.

You know that the human race is open to sense impressions. When children from various countries play with one another they do not express themselves in one specific language; they immediately play together. Instinct and nature make children act as they do. Young people who have not yet been affected by life, whether by certain desires, education, upbringing, or by a particular etiquette of convention, such people are more natural. The result of this natural state is that they are open to one another which is not true of adults. In addition, there is the extremely important development in the changing of ideas through the modern mass communication media, including television. This has caused a tremendous evolution. Or, as Marshall McLuhan says, The earth has become a planetary village. Who are the first and chief products of this world-village? The children! The young, who are now twenty years old, and who have grown up in this new world-village. Not the people of fifty or sixty, for they have not experienced or known the new situation in this sense. It is the young who have learned to know the earth in an entirely different and new way. It is they who react. It is they who are involved. When a space rocket is launched, the Egyptian, American, Swedish, and Dutch children all act in the same way. They are all interested in it. You must talk to children all over the world about certain matters, matters in which they share a common interest. As Jules Verne said, about everything which concerns the basement of their interest, the world, the space of their interest. Moreover, all the young of all the civilizations are nowadays particularly sensitive to the idea of justice. Adults always become cynical later in life. They say that they are more realistic, but it is the young people who in their idealism and naïveté demand justice. No matter whether in the Soviet Union, America, or India, they all share the same feelings.

Do you believe, like Dennis Gabor, in the perfection of man?

No, I do not. I think that this perfection depends on man's living conditions. I believe that conditions are against this. At the same time I believe...

Willem Oltmans, *On Growth Two*
that the young, who express a feeling which is by instinct directed toward the future, are pushing us to a unitary world, a world of solidarity in which people will be much closer to one other. The human race, after all, is an indivisible race. But feelings of solidarity must be developed.

That is the question around which everything turns?

Indeed. It is true, is it not? Abraham Lincoln said during the Civil War that the Americans could not possibly be one nation, one half of slaves and the other of free men.

But an important part of humanity -

I know. One-third of humanity are illiterate and two-thirds live in prosperity and are literate. We cannot afford to say that we, the others, are adopting a civilized attitude toward the rest of the world. That is precisely the point. The world is indivisible. When we speak of religious or cultural values, all of these are linked in every respect. One last example: As a Dutchman, you have experienced the energy crisis. What has it proved? That the world is interdependent and that the prosperity of Europe greatly depends on energy that is not present in Europe itself. If we do not succeed in finding a global balance, Europe will be permanently in the position of energy shortages and of running risks. If other countries do not help you in Europe, your entire prosperity -

What is described in Japan as the drawing of flowers on water?

Indeed. Yet, I believe that the lesson we can learn from this has already been learned by the young. For what is it that the young have been saying for years? The hippies and the others - what have they been saying? That they wish to live modestly and enjoy nature, not destroy it.

We now understand, after our experience of the energy crisis, that those poor hippies who were ridiculed ten years ago were fundamentally right and that they saw matters accurately. The future of the world lies in a certain return to nature, to leading a simple and far less wasteful life. Take the future of paper or books. There is a serious shortage of paper and of forests, which have already been destroyed for the large part, and it is simply impossible to obtain sufficient timber. The same will be true of a great number of other products if we go on wasting as we have done so far. The theoreticians agree that, so far, fifty percent of the world's energy has been wasted in the West.

When the young in your country, in the Netherlands, in England or America, began to form communes and announced that they wished to live simple lives and that life in a consumer society developed to an extreme

Willem Oltmans, On Growth Two
extent was no longer possible, we should have listened to them. They were right. What they said was sensible, even though it is often said that young people have no experience. It was, moreover, the first time in civilization, at least in that of the West, that the young had presented such problems to society. The adults said, Just amuse yourselves, study, work, think of your future. But the young asked, What kind of future? Production? What for? Develop? What for? What are we to do at school?

In your experience in UNESCO do you sincerely believe that the influence of the young is felt in your policies and decisions?

I believe so. I believe that the ideas of the young really play a part in UNESCO. We not only make sure of their presence, but we also use them like yeast, which is added to the flour to rejuvenate the mind, to be open to that freshness which finally means the opening to the whole of life itself.

I am the last person to say that young people are à priori always right in everything. No single race, no single people, and no single age has the complete truth on its side. Modern young people do not pretend this either. It not infrequently happens that they admit their own wrong with the same sincerity or for the same motives with which they fight the certainties of the older generation. But I have the impression that they preserve their inborn purity. I do not know with what instinct they feel the situations of the future or how they anticipate them with a striking accuracy of observation and anticipation which we, their elders, no longer seem to possess. They are like birds, performing great flights across the continents and knowing the islands which lie beyond the horizon, whereas our ocean navigators are unable to see the same things. We who sail the wide oceans without properly knowing where or when we will set foot on land have to accept these signals from the young as messages and force ourselves to decipher and understand them.

What is your impression from your contacts with various young people from many parts of the world? Do they look with optimism toward the year 2000?

A great number of them appear to be pessimistic.

I asked Madame Gandhi, ‘What do you say to the children of India?’ She answered in the spirit of, ‘The children have always found solutions to problems throughout history and they will find them again.’

You are asking, What can we do?

Precisely:

I believe that there is an important task in educating the young. And not

Willem Oltmans, On Growth Two
only in their education, but also in the education of our generation. Older people forget only too soon that they too continue to be in need of education. If we maintain our present methods of education, we will never solve our problems. We should show ourselves considerably more modest in our knowledge, in our ways of acting, and at the same time adopt new ways of bringing up the young. We should try to make it possible for the young people to accept earlier the responsibility for their own lives. Not that we should disengage ourselves from our responsibilities as their elders, for people always need one other. Even after the children have completed their school training. I recently wrote a letter offering my condolences to a friend who was in his fifties and who had just lost his mother. ‘I know,’ I wrote, ‘that your mother was an aged lady, but I realize that the loss of a mother is like losing part of yourself.’ What I mean is, as long as a man has a mother or a father, he has some support on earth. But the loss of an older person is like a whirlpool in the sea. It leaves an irreparable hole in a man's life. That is what I call the interdependence of the generations. It is a mistake, as is done in the West, to split the generations. When generations are split up, the result is that the older generation remains alone and becomes lonely.

We will therefore have to give responsibility to the young, but, at the same time, we will have to stay near them, as older persons. We should certainly not say, ‘Just get along by yourself,’ but, ‘Get along by yourself - however, I will be near you.’ There should be a dialogue between the generations. Modern society has discontinued this dialogue. The schools have made this situation worse. They have split up the community into educated and uneducated people, people with diplomas and without diplomas. Even here, within UNESCO, we have the professional people, the experts, the staff, and on the other hand the administrative personnel, the secretaries. The secretaries often are interested far more keenly in the various questions than the so-called professional people. All these segregations cause people to break up into groups. In their sensitivity, the young people feel that this is not the right method. We shall have to take a close look at the whole of our system, particularly as far as education is concerned. The young people know very well what is involved. They know what they say and they know what they want in life. And here, perhaps, there is a possibility to view the future not too pessimistically. After all, the danger lies in educating in a spirit of idealism and then keeping the young people standing on the sidelines, outside actual life itself. That is how you develop, in the young, ideas which have been produced by abstractions. Later, when they enter real life, they experience a great shock. We should gradually introduce the essence of life itself into our educational system. On the other
hand, we should not proceed too fast so as not to break the idealistic enthusiasm that characterizes the young. To me, every young person at any age is a source for reflection. The child who looks at you, the child who walks before you, should really be seen as our own complement. When we look at the young with these eyes, they will feel that they are supported by us.

*And is there reason for optimism?*

Yes, indeed there is.

**Eindnoten:**

1. See conversation no. 46.
2. See conversation no. 34.

**41. Takahiko Noguchi**

Professor Takahiko Noguchi was born on June 28, 1937, in Tokyo. He was graduated from Waseda University in Tokyo in 1963 and took his doctorate in literature at Tokyo University in 1966. Since 1968 he has taught literature at the University of Kobe, where this interview took place. From 1970 to 1972 he was a guest lecturer at the Yen Ching Institute at Harvard University. His writings include *The World of Yukio Mishima, Poetry and Truth in Edo Literature*, and *Tanizaki Junichiro*.

*Would you characterize modern Japan as a nation or as a huge tribe?*  
Japan is a so-called monoracial nation, linguistically and ethnically,
though there are complicated arguments prevailing on the origin of the Japanese people. We could say modern Japan is especially characterized by its strong uniformity.

*The emphasis lies on group identity?* 
Yes.

*In other words, the sanity of the masses is kept in balance by feeling secure through the group.*

Here we might have a problem of finding a definition for the word ‘group.’ If you mean by ‘group’ a family and its analogous system, such as a small society or a company, my answer is yes.

*You would include companies such as Mitsubishi, Yamaha, Sony, Honda, and the like?* 
Before World War Two, Mitsubishi, for example, was a very important family, a giant family trust with strong influence. But I think this group changed its character.

*In what way?* 
They ceased to be a mere family. They moved into another system of grouping, beyond the family system in its narrow sense.

*More like a small society.* 
Right. It contains various social elements.

*And class differences?* 
It does contain some classes. Mitsubishi is a superclass: many other Japanese companies are under its influence. They have the system of white collar workers who harbor strong feelings of fidelity toward the company.

*One reads in the papers about radical student groups, pro-Moscow leftists and pro-Peking leftists, attacking one another.*

What we often read about these days is a conflict between two major groups of young radicals who are neither pro-Moscow nor pro-Peking. They are the Chukaku-ha, the Revolutionary Core Group, and the Kakamura-ha, the Revolutionary Marxist League. The two groups continuously clash and attack each other in an almost tragic way, though originally both came from the same organization. They are independent of the political influence of the Japanese Communist Party, as well as of Moscow and Peking. After being
hardened by several bloody riots, the police power in Japan has become very strong, so it has become increasingly difficult for these radical groups to attack political causes.

_But are there also Communist students who support either Moscow or Peking?_
Yes, there are. But the situation is rather complicated. Before the well-known polycentrization of the Communist world, being under the influence of the Japanese Communist Party meant per se being loyal to Moscow or Peking. Now, after the schism, the political climate has changed. There is a younger group, called _Minshuseinen-domei_, the Union of Democratic Youths, which is under the influence of the JCP. There is also a smaller pro-Peking group that is independent of the JCP.

_What is the background of radical students attacking fellow students?_
There is a technical term for this in psychoanalysis - the sibling complex - which explains hatred among blood relations, for instance, that which may occur between an elder and a younger brother. We could compare these violent clashes with the same kind of clashes in the past among groups intimately related to one other.

_Also among friends?_
Yes. I used the term sibling complex in a rather allegorical way.

_What feeds this hatred?_
That is an extremely difficult question. First, many of these young radicals have lost their common political vision.

_Because of police pressures._
Right. Secondly, traditionally in the Japanese radical movement there exists a kind of hatred among members. The reason for this is that young radicals are excessively sensitive and alert in theoretical matters. There are sharp conflicts concerning the differences of their political opinions. Very often these are only slight differences in minor variance with the viewpoint of the common people, say, for instance, different ideas concerning minute details of revolutionary plans and programs. But to these young men, even the slightest difference can be of crucial importance.

_I have the impression from talking to a number of students that a general mood of pessimism prevails about changing the power structure._
I think the young progressives are too much in despair to design concrete plans which force sudden changes. The Liberal Democratic Party is still very strong - strong enough to maintain a half-eternal government. The young are disappointed. In their view the Communist Party and the Socialist Party exist simply to complement the Establishment.

But your nation seems rich, welfare for most is abundant, the economy is strong and healthy. People therefore don’t fight for ideals.

That, unfortunately, is not how things are in this country. Here is a hidden truth about the Japanese economy. Ask any average Japanese worker. He does not feel he is rich. Japan as a nation may seem rich, but the majority of its people have no feeling of being wealthy and its welfare is lagging behind.

Especially with the worldwide energy crisis. How does the state of emergency declared by the government during late 1973 affect people? Is there panic? How do the masses react?

So far there is little sign of the Japanese being seized by panic. People seem to expect a gradual improvement in the government’s economic policy to stop the progress of inflation. However, there also is a serious accumulation of social discomforts. Nobody can foretell what will be the result of this mass frustration. Some even say that the present social atmosphere reminds them of the eve of World War Two.

Does the average worker in Japan share in the affluence?

I do not think so. One sign of affluence may be the number of people who can afford to travel abroad. I just returned from Europe, where I saw many Japanese traveling. I admit we must have money to go abroad. Sometimes we have money to go abroad, but very often we do not have enough money to own a house or even to rent a decent apartment.

How would you describe the present mood of your own students? What is on their minds?

A kind of change of climate is taking place. What I mean is this: Two or three years ago, every university professor had to go through a period of so-called students' aggressive actions. But now the atmosphere is very calm at the universities. To be sure, there still are some strong radical student movements at a few universities, but on the whole the younger generation turned calmer and milder.

As in the United States?
In Japan we undergo a kind of cycle, a period of uprisings and then a calming-down stage.

*Like the seasons.*

I think so. I wonder myself why this occurs. Senior students learned a lot from their older brothers' generation - I mean, the Japanese radical generation that preceded them. I think they were made conscious of the damage caused by exaggerated hopes.

*Are they pessimistic?*

Not necessarily pessimistic. They have become rather pragmatic and realistic. They are concentrating their efforts on their studies and plans for later life.

*The American behaviorist John Platt pointed out to me how most of the San Francisco hippies of the sixties became Establishment men - suburban homes, two cars in the garage.*

I closely observed hippies in the United States, and never expected much from them, because they were rich and came from wealthy families. Japanese hippies have been copying the American model and as you said, they will sooner or later turn to the Establishment and become white collar workers. At the same time, however, the hippies as a worldwide phenomenon changed the social mood to a considerable degree. I know some students here who finished their studies at the university and found good jobs with one of our largest companies, but gave up their security and position and came back to the university to begin graduate work. They simply felt lost and disappointed to be one small element in the gigantic mechanism of such companies. Another striking phenomenon is that of so-called free workers, for example, free-lancing editors and copywriters. I think this section of our population is growing rapidly. They are liberating themselves from the lifelong employment system most common in Japanese society.

*Individualism is growing?*

Yes, if the world is defined as an attitude to prefer one's own initiative to his social rank.

*How do you think the Yukio Mishima incident affected Japanese youths?*

That's a very touchy subject with the younger Japanese generation. Mishima taught the youths that if they harbored an ideal, they must be...
prepared to die for it. I think the first outcome of Mishima's death was the so-called Asama Mountain incident, when young radicals killed their companions by collective lynching in the mountains and fought back against the riot police with guns. During the twenty-five years following the Second World War, we thought we had lost this kind of tradition. Suddenly it reappeared in the symbol of Mishima's suicide. I remember right after Mishima's suicide one of the leaders of the most leftist group said, ‘Mishima taught us how to die for one's political ideal.’ Mishima's initiative was a kind of impulse to reorganize the rightist movement in Japan.

*Did he succeed?*

No, I don't think so, at least up to this moment. He separated himself from any kind of rightist organization. He was basically a man of letters. He lived as a writer and he died as one. I believe he himself knew the irony of his pseudoarmy, called the Association of the Shield. He knew better than anyone else that it was a caricature of an army. He was a writer and at the same time he was a man of irony.

*What was Mishima's influence on Japanese literature? Or is it too early to make an evaluation?*

Perhaps. His subjects concerned the present literary situation in Japan in a very paradoxical way. Paradoxical, I said, since his subjects were how to reform Japanese culture by means of reactionary imagination from past tradition, like the faith in the Emperor. Furthermore, it would be very difficult to imitate Mishima's style. Young Japanese writers now start their own literary world filled with their own subjects through which they criticize and, in a way, evaluate Mishima's precedent, from a detached point of view.

*But he did stir literary discussion.*

Yes, exactly. Nobody can ignore the problems he proposed dealing with.

*Do you believe that with the global rise of materialism, Japanese youths will change or lose their values based on Japanese culture for so many generations? Yours is a very special nation with very special traditions.*

That is a very difficult question, because it covers a vast area and many aspects of civilization.

*They seem much more open and frank, like other youths throughout the world.*

Yes, they are more like youths in Europe or the US. Their new attitudes
are symbolized by blue jeans. I myself now wear a tie, which somehow symbolizes that I have become rather a middle-aged man, whereas youngsters wear jeans. They are expressing a new form of kinship with their contemporaries all over the world.

*Also through dress?*

They assert themselves by all wearing bleached jeans.

*But similar behavior could bring all youths closer to each other:*

Yes, I think this is the case. And the closer the ties are between youths of different nationalities, the more our Japanese youngsters change. At the same time, I am continually reminded of the fact that Japanese youths are Japanese youths. It might sound too matter of fact, but this question has two aspects. While Japanese youths approach some uniform identity on an international level, they nevertheless remain extremely Japanese.

*They are not losing their proper identity?*

No, they aren't. I think there are three strata or three dimensions in our culture. First, the surface of everyday life. It has become a matter of course in average Japanese families that we eat bread and wear Western clothes. But on some occasions that concern traditional customs such as New Year's day, even young girls put on the kimono. This I call another stratum of our culture. Then, there is the third element, which I'd like to call the core part of the Japanese mentality, or the unconscious sense of our nationality.

We already talked about Mishima's suicide. This incident had such a shocking impact that even those of us who were critical of his suicide at least thought about, and sometimes even rediscovered, their identity as Japanese. Mishima suddenly reminded us of our past, and of deep-rooted behavior patterns.

*That is the psychological part.*

Yes, you could say so. Only twenty some years ago the majority of the Japanese still clung to the imperial system in order to identify themselves as Japanese. That was an integral symbol to belong to a nation as one family. I would abhor, however, the reappearance of this situation.

*Is there a danger it might return?*

I hope not. In that sense, the Japanese fortunately lost a unique symbol. We might say they are looking for a new type of symbol of our integrity.
In its place came smaller symbols, like Japanese Airlines?

Oh, no. That is too superficial to be called a symbol. I think a better example is a catch phrase, ‘Discover Japan,’ on the posters of the National Railways, which you find all over the country. Or, as a minor example, the revival of the traditional flower arrangement and tea ceremony, which young girls want to learn before they get married. Or recognition anew of many other traditional arts and crafts. Or even the fact that our national costume, the kimono, is regaining its popularity.

You mean that the Japanese middle class is now beginning to act like the former upper class?

I don't think so. This has nothing to do with any class structure, but, rather, points to the fact that the Japanese people are reembracing their heritage.

With the communications explosion of the seventies, do you expect Japan to become internationalized?

Yes, especially the younger generation will be internationalized. A growing number of Japanese youths will have a chance to travel abroad, although this group will always be a minority and will not immediately affect the majority. There also will be an increase in the number of foreigners coming to Japan. On the whole, the Japanese will be increasingly exposed to foreign people and cultures. This trend has already begun and it is an entirely new experience for most Japanese.

You feel this is good for them?

Yes, very good. Permit me to mention something seemingly unrelated. Less than a year ago, one of our popular writers, Komatsu Sakyo, wrote a science fiction story about the submersion of Japan. The book became a best seller, which shows that although no one believes this submersion will really happen, interest in futurology and the environment have increased enormously.¹

I spoke with him recently. He told me it took him eight or nine years to write the book. Let me ask you to make one more evaluation or prediction. Japan depends very much on the import of energy and resources from abroad. Futurologists expect a worldwide energy crisis. Some expect a catastrophe. In the future, how would the Japanese people react to such a disaster? Become a military power again and invade Southeast Asia to take the resources it needs?
I may sound rather detached, but I think nothing ever happens in such a dramatic way. I don't anticipate a sudden catastrophe. But I don't deny that the energy crisis will gradually affect our life, and there is a possibility that some economic-political crisis will push the Japanese people to again invade Southeast Asia, at least economically. Nationalism in developing countries is certainly understandable, but in advanced countries this shows up as imperialism. However, at this moment I believe in the sanity of the Japanese. I hope we can, before that possibility becomes probability, reform the economic structure to something other than the presently over-industrialized state. To be an economically smaller but civilized country is far better than to be an economic giant under a military shadow.

**Eindnoten:**

1. See conversation no. 43.

42. **Zoya Yankova**

Professor Zoya Yankova was born in 1921 in the USSR. In 1947 she was graduated in history from Moscow State University. Since then she has worked in various sections of the Soviet Academy of Sciences on social problems concerning daily life of the Soviet citizen. At present she leads a team of researchers at the Institute of Concrete Social Studies. She has published some sixty books and special studies, among which are *Changing Structures and Societal Roles* and *The Twentieth Century and the Problem of the Family*. This conversation took place at her office in the Moscow Institute of Concrete Social Studies.
If sociology in the Soviet Union means the study of social laws which determine human behavior, is this what your institute is essentially studying?

We not only concern ourselves with these activities, but we also study people's requirements, general interests, and attitudes. Our institute studies problems of the sociology of labor, the structure of Soviet society, problems of work and leisure, the sociology of the family, and public opinion.

Is it true that Soviet sociology looks upon the behavior of man as a social system which is interwoven like a tapestry?

This question has two aspects. We study the internal structure of the family. By internal structure we mean the nature of the relations within the family between the spouses, between the spouses and their children, and between the children. We also study the relationship of the family with other average families, with collective society in a broad sense, for instance, that of families with their neighbors. In addition, we study the family in relation to the system of other social groups.

How is your work related to the state? How do you teach children to become integrated into society away from their families?

We family sociologists believe that the optimum system of education consists of an organic combination of training within the family with social training. Under the Soviet government an educational system has been created which consists of three elements: family, school, and society. The family - this is clear - means training received within the family. Training at school is also obvious. Children go to school or to other organizations for children, for instance, a boarding school or a kindergarten. But in addition we have formed social circles which also exercise their own influence. In our country, a town is divided into districts, and every district is divided into microdistricts. Each of these microdistricts contains about 12,000 inhabitants and is governed by an administrative board, or zjek.

This board looks after the exploitation of dwellings, for instance. In the zjek, coordinating councils are formed from the community. The councils contain on the one hand the occupants of dwellings which come under the zjek. On the other hand there are teachers from the schools in the microdistrict, the headmaster of the schools, and the heads of organizations which operate within the territory of the zjek. If the children are not with their families or at school, but are playing outside, the coordinating council assists in keeping them occupied. The council organizes clubs in the office buildings of the zjek, arranges for excursions with the children, and
organizes nurseries. So, our children are trained by their families, their schools, and by these broad circles formed from the community, which together operate within the territory of the zjek in which the family lives. This system - school, family, and the community - is, in our opinion, the optimum one.

And what about the state?
This is an overall education which is indirectly organized by the state. It corresponds to the training within the family and what we might call the social training within the zjek. The state education is one of the elements of the entire educational system.

Does a zjek have sociologists?
We are doing our best to attract them. In any case, there is a teacher, who receives a fixed salary. He works in the office building of the zjek. His main function is looking after the children of the zjek when they are not at school or with their families, in other words, during their leisure time.

And what about psychologists?
In principle, yes, but not all zjeks have their own professional psychologists as yet. In any case, each circle has its sociological service, that is to say, continuous investigations are made regarding the requirements of the population of the zjek.

To whom can the children go with their problems?
When they have some kind of problem within their family they can either go to the teacher in school or to the teacher in the zjek. A new form of education has been created here. Furthermore, within the territory of the zjek, departments of children of various ages are formed. The departments are divided into older students, secondary students, and younger students. At the head of these departments are the older students, usually members of the Komsomol. The departments form an educational unit in which all the children who live within the territory of the zjek concerned can, first of all, spend their leisure time. Here they come to do their homework. If they cannot manage it themselves, explanations are given by older students. They go on excursions together, which in one way or another answers the children's requirements when the family or the school cannot take care of such needs.

We have conducted an investigation of two zjeks in the district in which our institute is located. My group, which studies family problems, has
conducted a special sociological investigation in order to find out in what way life in a zjek is organized, how the educational activities are set up, what the requirements of the people are, and how they wish to organize their leisure time, within the territory of the zjek as well as its boundaries. There are investigations to find out what kind of provisions they prefer to meet their daily requirements, what satisfies or dissatisfies them in the present provisions, and what new aspects of daily life have been created by them.

I might say something concerning the results of this survey in our district - the Czeryomsk district of Moscow. This district is divided into twenty-eight zjeks, all situated within this one district. Our concrete sociological investigation has shown that a large percentage of the population, for instance, prefers to spend its leisure time within its own districts. People living in a large town get tired of making regular trips to the centers. If we do not take into account the theaters, such as the Bolshoi, which are situated in other districts or in the centers, or the central libraries, to which special trips have to be made to certain districts, certain smaller forms of daily life remain, and it would be desirable to develop these, particularly in the microdistricts. For instance, people have expressed the wish that roundtable meetings be organized within the zjeks. These are held when some problem arises which is of interest to the population, for instance, the education of the children in the zjek when they do not have to go to school or during the time when they do their homework. The population has expressed the wish that at regular times - once a month or every six weeks - a roundtable meeting be organized in the club of the zjek, a meeting to which specialists and teachers are invited. Here, are discussed problems concerning the way in which the children can best be occupied during their leisure time so that their cultural level is increased and they do not endlessly roam the streets. Another problem of interest to people, as appears from our sociological investigation, is that many people would like to attend round-table meetings in order to discuss the problems of the organization of the lives of old-age pensioners. In a large city such as Moscow, and in other cities in the world, there are large numbers of retired people who cannot adapt themselves during the first period to their new way of life, and the population would like to listen to special lectures on this subject. Instead of reading specialized literature on this subject, people prefer to come to a round-table meeting in order to discuss how young people can help the old-age pensioners in their zjek and how they can render certain services, for instance, through the Timur brigades which have been created in many places. These brigades were organized for the first time during the war. Now they are being organized again all over Moscow. In these brigades children
take over the responsibility of helping elderly people, particularly old-age pensioners. People therefore wish to discuss at these meetings what can be done to enable the pensioners to have a pleasant and quiet time within the territory of the zjek, to find out what they would like to see, to what lectures they wish to listen, and so on. And people want to discuss how the daily requirements of the population can best be met. Everyone wants to organize his district as well as possible and to direct the efforts of all the zjek inhabitants in such a way that, for instance, flowers are planted in the area of the zjek, that there will be plenty of green, and that there will be possibilities for listening to music.

*Are you a sociologist yourself?*

No, originally I was a historian. So far, we have not had any specialized sociological training at our universities. I completed my studies of history and acquired my knowledge of sociology by self-study and by following specialized courses later on.

*Is your staff made up of male and female students?*

Yes. My group consists of students and young collaborators, boys and girls, and we also have students available for doing our practical work - economists, statisticians, and students in history and philosophy.

*How many people are in your study group?*

There are nine.

*Does this system of zjeks also exist in the rest of the country?*

Yes, in agriculture - the sovkhozes and kolkhozes - are also divided into separate ‘settlements’ when the villages are sufficiently large. The villages are then divided into parts which can, in turn, organize the entire educational life within their - how shall I say it? Here they are not called zjeks, but they are also territorial population units. In small settlements, such an administrative division does not exist. When a large settlement is involved, it is divided into administrative sections.

*What does the institute do in regard to studying the lives of working women in the Soviet Union? I understand that thirty percent of the working population in your country are women.*

No, the figure is fifty-one percent. My group, which occupies itself with family problems, naturally also studies the problem of working wives, for the fact of a woman working in the social production process is seen by us as
very important in the change which occurs within the family. For this greatly influences the structure of the family, the structural relations within the family, the authority of the wife seen through the eyes of her husband, and her authority toward the children. We are seeing the rise of new roles which are played within the family.

Judging by this high figure of fifty-one percent, I would be inclined to conclude that the children in your country are educated more by strangers than by their own families. Is it likely that shifts will occur in their affections, and how does all this influence the essential relationship between parents and children?

In the literature, mainly that coming from abroad, one often comes across the point of view that the emotional ties in the family are destroyed when both the husband and wife spend a large part of their time in the social production process or when they participate in the political life, and that the children are left to themselves. However, our sociological investigations have shown a completely different picture. The relations appear to be far more complicated. Our investigations have shown that the time that is spent together by parents and children is now much shorter, but affection and the meaning of the family relations become much profounder. Not only are the emotional ties strengthened, but the content of these relations generally means a change in the understanding between parents and children. Why is this? Indeed, the husband and wife are away from home during seven or even eight hours a day during ordinary working-days when they spend their time working in the social production process. During this time the children are either at school or in a boarding school, or else they are with other members of the family. They often go out to play within the area of the zjek. Often the parents only come home in the evening to eat together with their children. But against this, during that part of the day which they spend together - and this has been shown by investigation and is not a speculative conclusion - they spend the hours of the evening together and exchange news with one other. The parents tell what happened at their work, while the children tell what happened at school. The parents try, as it were, to check the children's lessons. They exchange opinions concerning the books they have read or the films they have seen. This is one side of the picture. Consequently, the relations become much more intense, although on working days they naturally have little time in which to see one other.

An increasing number of families are spending Saturdays and Sundays - we have two days a week off - together with the children. They go out together, go to the theaters or museums, and spend their holidays together. So when

Willem Oltmans, On Growth Two
we look at the year as a whole, we arrive at the conclusion that the amount of time spent together does not actually become shorter, that mutual relations become more intense, and that the emotional side of family relations grows stronger.

In addition, working wives enjoy more authority over their children. The child can now get an answer from its mother to many social questions. Finally, a man's wealth is determined by his wealth in social contacts. Seventy-two percent of the investigated families now spend weekends and holidays with their children.

Do you think that Soviet families will become smaller and smaller by the year 2000? And what will be the future picture of the family in Russia?

You know, the family is a very special unit. On the one hand, it is governed by our legislation, norms, and traditions, the same as other social units. On the other hand, the family carries a much heavier weight of those relations that are based on emotions, feelings of love, respect, or mutual understanding. This specific characteristic of the family makes it in my view possible to arrive at the opinion that, as society as a whole and man himself become increasingly perfect and as man's personality is better formed, the importance of these spontaneous relations, which are based on the emotions, respect, and love, will grow more and more, whereas the importance of the norms and traditions, which used to regulate all the functions and relations along very strict lines, will decrease. The growth of civilization will mean the growth of man's emotional relations, mutual understanding, and mutual support. The realization of our common goals will also acquire a much greater importance. I believe that even today we can observe a reduction in the size of families. This has been taking place for a considerable time. At the moment the average family here consists of three and one-half persons. Perhaps the size of the family may slightly increase in the future, for I believe that the need for children, for unity with one's nearest relations, and for love will become increasingly important every year. For, as our personal requirements grow, the size of the family will grow slightly. The optimum size of a small group is, after all, five to seven persons. For the time being, my opinion is not based on calculations but on the belief that as man's emotional civilization increases, he will feel a growing need for solid emotional family ties.

But in the year 2000 the world will probably count 7,000 million inhabitants. How are we to supply all these people with food and work?

I don't believe that the size of the family will increase considerably. One
part of our republic has too small a population for its production process - that is why I believe if we could solve the population problem within the frontiers of our country, there would be no danger for the time being of the population here becoming too large. Moreover, I don't believe that families will grow greatly, for owing to the improvement in living conditions and the increase in material prosperity, the number of families that contain not two, but three generations will rise. This means that many grandfathers and grandmothers will be living next door to or in the immediate vicinity of their children and grandchildren whenever conditions permit them to do so. Thus, the size of the family as such will increase. If there should be slightly more than one child to each statistical family, this will not cause the general size of the family to increase very much, but it will, in my opinion, result in the fact that the emotional level of the family will be increased. We have some republics in which the families contain five to six children each. Here, the number of children will probably slightly decrease. These are the republics such as Zerbeidzjan, and, generally speaking, the republics of Central Asia and the Caucasus. But in parts of the USSR, such as the Baltic regions, or in central cities such as Moscow and Leningrad, there is a large percentage of families that have only one child. In these republics and cities the number of children will rise slightly in contrast, and in this way the average of the country as a whole will be slightly leveled off so that the overall size will not increase to an important extent.

Some of our women who have read novels dealing with this matter, including novels from the West, have asked us sociologists the following question: Will the fact that wives are taking jobs on a large scale within the social production process and in political life negatively influence relationships within the family? Our investigations have shown that in families in which the wife is working in the social production process, occupying herself with interesting, meaningful work, the emotional climate is better. The husband's attitude toward his wife is far better. He helps more often with the housekeeping or in educating the children, he allows more often for her opinions and, in addition, the wife in such families plays a new role. Not only, as before the revolution, does she serve the family, but she now acts as an organizer of the family's leisure time, makes important social decisions, determines the future of the children, and so on. The result of doing meaningful work outside the home has not, therefore, had any negative influence on the internal structure of the family. On the contrary, it makes for a genuinely collective family. All this is proved by our sociological material. And that is not all. It has also been shown that many scientists and journalists confuse two concepts: family equality and the role played by
the father. Consequently, a number of them think that all problems within the family will be solved when the husband and wife play completely equal roles and perform the same functions. The husband washes one napkin and the wife another. The husband clears up one half of the room, the wife the other. This is only to explain what I mean. Swedish sociologists have even jokingly put the problem as follows: ‘Is it possible for the father to be the mother?’ They believe that if the father can be the mother, this will mean complete equality. We have a different opinion: that equality should take the form in which the father fulfills the functions of the father and generally remains the father whereas the mother remains the mother, but everything is arranged between them on a basis of sensible agreements, mutual assistance, and support.

43. Sakyo Kamatsu

Sakyo Kamatsu was born in 1931 in Osaka, Japan. He studied Italian literature at the University of Kyoto. In 1963 he published his first work, Chi Ni Wa Heiwa O (Peace on Earth). In 1973 he published a best seller, Nihon Chimbotsu, about the submersion of Japan through a natural calamity. The New York Times remarked that Kamatsu showed such expertise in his description of the geological conditions of the earth that his book ‘gained in frightening reality.’ Some 3.6 million copies were sold within the first six months. Other well-known works are Chizu No Shiso (Thoughts About Our Map), Mirai-zu No Sekai (Forms of a Future World, and Chikyo O Kangaeru (Thoughts About Our Earth).

Madame Gandhi told me in New Delhi that in spite of doomsday voices, she was basically optimistic about the future of man.
I think she was to some extent correct, because man invented the ultimate weapon, the hydrogen bomb. Initially, in the sixties, relations between the USSR and the US were bad, but after this weapon was invented, these great powers chose to accommodate.

_Under pressure of total destruction?_

I think so. They tried to find ways not to be forced to use those weapons. I think they succeeded.

_But only by creating a balance of terror._

Yes. We should remember that human beings never try to find ways to coexist unless threatened by such inhuman weapons.

_That is human nature?_

To some extent, because human beings have been very naïve about their innovations. When Westerners discovered the technique of transoceanic navigation - in the sixteenth century, I believe - they used this technique to travel to other continents, to discover other worlds. At the time, they also possessed a comparatively strong weapon: the cannon.

_They used it to subdue the inhabitants of the lands they discovered: colonialism._

Right. They conquered the Indian continent, for instance. Or think of how many American Indians were slaughtered by the guns of adventurers who came looking for gold. But gradually some doubts were raised in the minds of Westerners and step by step they stopped such cruel behavior. At present, we note the so-called peaceful coexistence between Russia and America. But does this lead us, like Madame Gandhi, to be optimistic about the future? Surely, there are many different problems for the future. There will be shortages of energy and natural resources. We will run short of petroleum. There will be a population explosion and worldwide pollution. These questions will be much more difficult to deal with than the H bomb. Did you discuss the population problem with the Prime Minister of India?

_Yes, I did. I asked her what she thought of the Chinese methods of dealing with these questions in an authoritarian manner. She replied that as a responsible leader in a democracy, there should be no enforcement from above._

Madame Gandhi is right in principle. But I do not think she will be successful in meeting India's population problems. I know some aspects of

_Willem Oltmans, On Growth Two_
Indian society. Their culture is quite different from that of Japan or Europe. I have seen some of those one hundred and seventy million cows in their streets. As you well know, cows are still holy in India. They are not to be used as food.

*There is indeed quite a difference from the Japanese approach to life.*

I knew and studied a man in Benares, a low-caste person, an untouchable, who gave his last food to his cow, while he himself was starving to death.

*What made you decide to write your doomsday novel?*

That is a long story. First of all I must explain that Japan is a very special country. We have been fortunate, compared to other Asian countries, because our archipelago was isolated from the continent by a wide strait. The distance is at least two hundred kilometers from the mainland. Our ancestors started to conquer these islands about one thousand and some hundred years ago. Our country began its career by isolating herself from the continent.

Do you know the origin of the word ‘kamikaze’? It is the name of a very special attack during a war we once fought. The word dates back to the thirteenth century when Mongolian armies tried to invade us from across the sea. Their fleet appeared on the coast of Kyushu Island. Japanese samurai defended the coastline, but it seemed as if they were going to lose the battle. At that very moment, an extremely strong typhoon came storming onwards preventing the invaders from landing on our western coasts. Our people called that typhoon *kamikaze*, which means ‘wind of God.’ That was one remarkable example from our history, which is full of such lucky events.

You will recall that in Europe, Attila, King of the Huns, easily succeeded in invading Roman territory, which brought about the movement of the Germanic race and caused the fall of the Roman Empire. The invasion of the Mongolian armies also caused great changes on the Eurasian maps and we see long histories full of violence.

The peoples of the Eurasian continent have known many racial and national tragedies, seen the fall of states, the destruction of cities, massacres, the annihilation of cultures and languages, epidemics, and so forth.

*Which brings us back to your inspiration to write Nihon Chimbotsu, The Submersion of Japan.*

This is the beginning, the fundamental motive, which makes me feel that we Japanese are too naïve about the tragic histories of other nations. Japanese history in general was very lucky until we tried to conquer
Southeast Asia. Our success was very brief and we withdrew to our four small islands. Once before in our history, a Japanese dictator, Hideyoshi, tried to intrude into Korea. He even reached Peking, but in the end he failed. Japan was the only Asiatic country in the nineteenth century that succeeded in developing stages of industrialization. We built a modern national state and protected the Japanese people from invading colonialism and imperialism. One other example in Asia is Thailand. However, the Thai remained an agricultural state, mainly a rice-producing state. Japan was alone in Asia in industrializing itself. One reason for this was that Japan was not totally isolated from the rest of the world. Conquerors failed to invade and occupy our land, but we were able to import goods and products from overseas, as well as knowledge and books from China. Our society progressed because these outside contacts enriched us.

*But I would still like to know what inspired you to write the book.*

I wanted the Japanese people to look at other countries and other cultures as they do their own national experience. There are so many different cultures in the world. Let us take our own Japanese culture, our own society. The mind of the Japanese is naturally closed, or, rather, it shows a tendency to be naturally closed. What I tried to do by writing this book was to find a hole in this wall for our people to peep through, to look through to the outside world, to enter the real world like a pilgrim. That is what the book is about. I liked to show our leaders the true situation of our country today, our nationality as seen from the outside. I created the fictional situation, the annihilation of our homeland, in order to eliminate, to drive out, the supernationalistic sentiments of the Japanese people, as they still prevail in our mother country, cosy and dating from ancient heritage. *The Submersion of Japan* is only an introduction to the vagrant story of the Japanese nation.

*Do you feel your book caused the awakening you intended?*

The Japanese now see themselves through the eyes of others. I tried to make my Japanese readers see with their own eyes different cultures, nationalities, nations. 

*So your best-selling book was intended to make the Japanese reevaluate different cultures around the world. That is what the book was about and it promptly became a sensation.*

Yes. Unfortunately, I did not finish my book. My publisher told me they wanted the book quickly. So I gave them the first part, on which I had been working for nine years.

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So there still is a second part to come. When will you finish it?

I am not sure, but I hope within at most two years. I expect the second part to be more difficult to write than the first volume. I intend to deal with the different fates and treatments Japanese people are now experiencing in different parts of the world.

Do you also write articles for Doomsday Magazine? What is the purpose of this publication?

I do not know exactly; I am not the editor. A general mood of catastrophe prevails in Japan. Eschatology, the study of catastrophe, is popular these days. In some ways, the Japanese are confused in facing this newly won, unknown ‘affluent society.’ They are frantically enthusiastic about economic growth, but at the same time they fear an explosion of this new economic machine, which day after day seems to be accelerating, expanding, and becoming ever more uncontrollable. The final result, it is feared, may be the total destruction of our lives and of society.

But do you yourself believe in this doomsday philosophy?

Yes. There could be a catastrophe some day.

Are you pessimistic about the future?

No.

That seems a contradiction.

The concept of doomsday is, I think, religious and symbolic. It does not mean the disappearance of our lands and our nation. The bursting of the economic and social system would cause tragedies such as poverty, starvation, panic, violence, riots, and anarchism. We would be forced to return to the level of prosperity prior to World War Two. Many of us would certainly survive, and try to find much more clever ways to live, through the bitter experience of tragedy. I myself, of course, hope that such an ‘economic doomsday’ can be avoided. Therefore, I have introduced into my book, in some sense as a warning to our society, an outline of our natural, national, and international situation as seen from abroad, looking at Japan from the outside.

Do you think the Japanese people are mentally prepared to face some future ecological or economic disaster?

Yes, to some extent. One purpose of my book was to make the people more aware of the dangers surrounding Japanese society. We jumped into
industrial power from the tradition of an agricultural age. The Japanese people and their leaders became very enthusiastic about the newly found power of the industrial age. They treated this power like a baby. Then, during World War Two, we were faced with a kind of doomsday explosion in Hiroshima and possibly even with the destruction of all of Japan. Following the war we got our latest toy, economic power.

_A dangerous toy._

Yes. For example, Tokyo is now one of the biggest cities in the world. The population is more than twelve million. All the new modern buildings are built of glass. Our motorways are lifted high up in the sky or pass rivers through tunnels. We have subways and underground shopping arcades forming a labyrinth beneath the city. We maintain offices of large enterprises concentrated in the heart of the metropolis. More than eight million people work during the daytime in that very narrow space of the city center. In only twenty years, the entire design and planning of the city was transformed into the function of top efficiency and economic activity. But we ignored safeguards for the security of the life of the ordinary citizen. Almost nothing was done in this respect. It is quite a possible that there will be earthquakes in Tokyo and Japan, perhaps even in the near future, but people refuse to think about it.

_Is this science fiction or fact?_

These are forecasts by our most prominent geologists.

_So that is what scientists expect._

That's right.

_You plan to write other books to help prepare Japan to meet the year 2000._

I have been asked to write them.

_I hope it will not take you another nine years._

I hope not. Perhaps you could help to persuade our tax people not to take ninety percent of my income this year. We now have a so-called progressive taxation system in Japan, which is very severe, you know. If they would leave me more funds, I could concentrate on my work.

_How do you view the future, especially concerning the young, during the next quarter century?_

I am optimistic. There are, of course, cynical prophets of doom all over
Japan, writing both in the newspapers and the weekly magazines. But I believe that the young people will have a clearer view of how our future should be handled, how to deal with the gigantic economic power, and, last but not least, how to handle problems of nationality.

Of survival in general.

Of survival. I think the young will contribute heavily in establishing a new order, a new world, for the future.

Are there any signs, in your opinion, that the present youths of Japan are preparing themselves for these enormous, unimaginably difficult tasks?

I see several signs suggesting that the younger generation is much superior to the elder generation of Japan, especially in their sensitiveness to the new stages of a humanized world. They possess a more realistic sense of international solidarity, peace, happiness, and friendliness toward foreigners, for instance. They are free from greed, from which the elder ‘starving generation’ still suffers. They are also free from the arrogance and the sense of discrimination that imperial Japan had. They are called the beautiful people, but at the same time they often ignore or have no firm knowledge of the new stages of growth in the world. Sometimes they are misled to act toward violence and terrorism. I'm sorry that our utterly old-fashioned educational system has failed to offer these ‘beautiful’ souls modern and solid knowledge.

Are you optimistic about Japan and about the planet in general?

I think human wisdom will triumph in the end. It will arise from the depths of souls of all people.

You write a book about Japan going under, submerging under the sea, but you believe wisdom will rise!

Yes. [Laughter.]

Your next book, then, should deal with the wisdom hidden in the soul of man coming to the surface to save man from doom.

You are right. I think human beings are much wiser than most people assume. When we read history we can easily find tremendous numbers of examples that prove man's cruelty, stupidity, aggressiveness, and arrogance. You may become sickened and desperate over human nature. But we should be aware that tragedies are apt to attract our attention. If carefully explained, we could discover one day that most tragedies are caused by
mutual fears and misunderstandings between different cultural values, which bring out hidden aggression and cruelty in men, and at times turn them into wild animals. However, even wild animals coexist all over the earth with large numbers of species. There are exquisite systems which enable all creatures to avoid collisions within the same specific cultural boundaries. Dr. Konrad Lorenz and Dr. Nikolaas Tinbergen, 1973 Nobel Prize winners, helped to prove the existence of these well-designed and unbelievably delicate systems after long and careful observations.

The same system, of course, exists within the mass of human beings. If we read human history carefully, we recognize this. I would even say that in the so-called historical descriptions we are inclined to note only the tragic events. Tragedies, of course, are more sensational to report on than details about a calm, peaceful, and pleasant life. In his perpetual efforts to find ways to coexist peacefully, or ways to reconcile differences with one another, man has partially failed, but in general he has succeeded in creating more harmonized relations among races and cultures. We still exist even after passing through several changes of climate, big wars, epidemics, and uncountable numbers of culture clashes. Homo sapiens still continuously grows.

Today some 150 nations, belonging to different races and cultures, coexist on this earth. This is the most eminent proof of our success, I feel. Of course, the success is not perfect.

Many conflicts and difficult problems in our world remain, both major and minor ones. Some of these will be solved in due time. Some solutions will possibly become vital to survival in the future, such as the population explosion, food shortages, the relative lack of natural resources, pollution, poverty, wars, the proliferation of huge war machines, historical hatred among tribes, and the unequal distribution of wealth. I don't like to admit that the most fearful tragedy looms in the future of mankind. At times, even, total disaster seems inevitable. But still, I believe that if doomsday really were to occur in the near future, part of mankind would still survive and would try to rebuild the world more intelligently than we have done so far, creating a new order based on learning from the experience of such a colossal tragedy. I am not a prophet, nor would I prefer to threaten the peace of mind of the common people by creating fearsome visions of a future doomsday. Nor would I like to be a loud-voiced accuser of our present society. What seems to me most important is, I believe, to try to cool and lessen the overheated feelings of aggression in our society. All the threatening words and loud voices exaggerate and amplify people's excitement and feelings of insecurity. Therefore, I have applied the form of science fiction in order to present my thoughts to the public. I present a kind of might-be-possible
nightmare, praying that the vision of disaster will be accepted by readers as a warning and will at least lead them to become aware of the necessity of a total reexamination of our society and situation as a nation. I never assert that doomsday will arrive in Japan, not even a ‘limited’ doomsday. I only recognize, or, at least, I myself think I am able to recognize, several sinister symptoms and the possibility of increasing and imminent danger to our society.

But if doomsday were to really come some day, I hope that I could contribute to lessening its impact. Perhaps I could help save the lives of two persons, through my modest ability and my modest works, so that at least one ‘beautiful mind,’ one person with braveness and guided by self-sacrifice and modesty could be saved.

I don't think I am making it sufficiently clear why I am pessimistic and optimistic at the same time. Nevertheless, I hope that readers might perhaps feel what I have been trying to convey.

**44. Romesh Thapar**

Romesh Thapar was born in India in 1921 and has worked as a journalist for the past twenty-five years. He is director of the Indian International Centre in New Delhi and publisher and editor of the magazine *Seminar*, a monthly symposium about international affairs. From 1966 through 1972 he led the Indian delegation to UNESCO meetings. Mr. Thapar is an active member of the Club of Rome.

*Some critics of the Club of Rome who come from developing lands accuse the organization of being too much of a rich men's club. From some of your remarks I would conclude that you are among these critics.*

I would not like to depreciate the work of the Club of Rome. I feel that
anybody who is making a sincere attempt to make our world more conscious of the problems that are likely to arise in the future should be encouraged. We all are children of two thousand years of conditioning. We tend to think along the old grooves.

It is against this background that the elite reads of *Limits to Growth*. In the part of the world I come from, where two-thirds of mankind actually live, we get a feeling from hearing about this study that a bunch of intellectuals from developed societies would like to stop us right where we are now. We see this attitude as neocolonialist. There is growth and growth. And what would happen to the backward two-thirds if we were to embark on the road to becoming another America?

What is this America? What is this Europe? What is this affluent world? We find that it is nothing but a world which has on the surface a great deal of comfort and luxury and so forth, but deep down there are layers of crises. There is a constant tension in which this affluent world is living. If this affluence, if this development, is going to lead us to these kinds of problems, reflected, for instance, in the presence of drugs, then we are really all in for serious trouble.

When we look back at the great civilizations of the world, we find that they were healthiest when they were simple, austere, disciplined, creative. They became unhealthy when overelaborate -

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_A dead-end street._

Yes - vulgar, consuming vast resources for no particular purpose. That is the kind of alarming situation you find when you come from Asia on a visit to the affluent world.

The crux of the problem is that we have turned global. It is no longer possible to live in isolation for long. China had to isolate itself. Mao could not afford to repeat what had happened in the Soviet Union. He could not allow China to ‘bourgeoisify,’ because the socialist experiment in his country would have crashed. It is different for Russia. The Soviet Union is faced with a relatively small population in almost endless territory. Therefore, Russia could afford to talk about some day doing better than the United States.

But this is not what the socialist dream was about. The socialist dream was to create a new man. Not a prisoner of a machine. A man who dominates the machine, who makes the machine work for the common good.

We find there is no real effort on the part of the rich half in this world to understand these problems. ‘Let us now grow more,’ say the affluent all of a sudden. But what about the underdeveloped world? Ruling elites there

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*Willem Oltmans, On Growth Two*
look to the affluent nations and say, ‘We want to be like them. We want cars. We want luxury. We want all of the life as pictured in glossy magazines. We want to embark on this road too.’ You will find elements of this thinking throughout the developing world. Even in China. I was told that when a visitor to Shanghai the other day remarked to a Chinese official, ‘How nice, you have so little automobile traffic in Shanghai,’ the Chinese host remained grimly silent. He, too, probably dreams of the day when Shanghai will have all those cars.

It is my view that we must begin to discipline our society, the world society, in those areas where we are most affluent. Just as in a country, a clan, a family, you first discipline the richer elements, the more wasteful elements, in order to establish a healthy egalitarianism. For the reorganization of the world a similar approach is needed. If the Club of Rome is truly dedicated to the task of helping to organize the future, it must begin to tell the affluent societies that there is a maximum beyond which all is waste. I think this is what the club in fact is saying. But the moment we begin to fix a maximum, people feel they are being pushed down, held within a framework, not allowed to grow more and more. This is nonsense, because within a stabilized society you go on improving the quality of life within that stability. You spend resources. You expend efforts. But all this is to improve quality, not to create quantity.

I believe the new thrust of the Club of Rome should be Limits to Waste. It should, instead of sparking depression, make every person in the affluent world, as well as in the developing societies, conscious of the utter waste which is so inherent in our everyday actions. There is waste of space, waste of food, of water, of clothing. There is even waste in just producing babies, you know? The Club of Rome's new line, Limits to Waste, could well be the next phase of activity for this organization, since such a program cuts across the boundaries of the rich and the poor in the world. This, the Club of Rome must achieve, because otherwise it will end up where it started - with a report and with computers.

*The club's greatest problem is to translate findings in laboratories into practical action.*

Limits to Waste would be action. It is, interestingly enough, what the Japanese at the Club of Rome symposium in Tokyo have been asking for. The Polish delegates, the South Americans and Africans, they all stressed these points repeatedly. From Limits to Growth we would move to Limits to Waste, to arrive ultimately at Limits to Wants or Desires. At that point we would really become civilized, because we would not encumber ourselves.
with the vast, irrelevant paraphernalia of the present-day affluent superstructure. One leads a life which is satisfying, so that the individual can be really free. He is not chasing more and more every day what he does not really need. We would have to do this in freedom. If we do not to react like this -

*The world will have authoritarian solutions to its problems.*

India will, for example, not remain an open society in a world full of waste, and, let’s not forget, full of affluent talk. India will only succeed in motivating a democratic people if others more affluent see the perspectives and act on them. Otherwise, we in India, will have to close our frontiers sooner or later to insulate us from wasteful standards. How else could we keep our people alive? The combined populations of India and China will have crossed the 2,000 million mark by the year 2000. That is a fact we should always remember.

*Yes, and one society is regimented on the basis of strict rule, while the other grew up in almost complete freedom.*

You see, each society has its own characteristics. China, for example, has a collective conscience.

*Do they?*

They have. They have always had it. Their society, I think, is a collective one. They work well together. We Indians have always been individualistically inclined. Always. Hinduism has preached individual salvation, it has never preached collective salvation. Then, one hundred and fifty years of colonial rule underlined this attitude even more, because the British happened to be terribly class-conscious. In other words, on top of the caste system, and its individualistic searching for salvation, the British came to our land with their class consciousness. The Japanese consider us Indians the Englishmen of today’s Asia, and in many ways we are!

China is more or less a single nation-society. It is also almost a single culture. Whereas India is a multicultural society. The Communists call it multinational, which I consider quite valid also. It is quite possible that the India federation will grow into many more states in the next decade. The Indian federation is rich, but it needs to grow into a number of units in order to become even more healthy. Few Indians will perhaps agree with me, but this is one of the things I feel strongly about. In a recent issue of our magazine, *Seminar*, it was proposed that India be a federation of fifty-eight states. We should decentralize. It would lend dignity to man. I think India is
already experimenting with a political form of federation which is in advance of the experience of other regions. We are already in the midst of the kind of political challenges which will develop for other regions in the future. India is really Europe. It has a single leader, a Prime Minister, with a single Cabinet sitting over the entire area.

In this sense, the experiences of China and India are very different. Nevertheless, I do think we have to apply more discipline, more collective action, in managing our affairs, while China has to assert greater individualism, because her rich traditions will be crushed under the weight of those Red Books.

*You said at a UNESCO conference in 1966 that most models studying life and human behavior in the future suffer from the desire to preserve many of the norms we are already accustomed to. Is this not particularly true for the developing nations?*

The standards of living prevalent in the affluent pockets of the world have been so widely advertised by the mass media that they have become synonymous with civilized living. In other words, the wasteful life, the perpetual desire for more and more of what we really do not need, has been enthroned as the great god. Elites in the developing world imitate these standards and alienate themselves from their people. Naturally, as a result, the people of the developing world are motivated to demand these standards for which the resources do not exist. We must globally confront and defeat this model of living. I believe the first task is to discipline the affluent. Without such disciplining the false standards which have been enthroned will not be toppled. This is a major undertaking with all manner of psychological complexities. We ignore it at our peril.

*You also signaled, some years ahead of the Club of Rome, ‘that the very process of growth was to divide our world into distinct areas.’ You indicated that the gap between rich and poor would widen to an unacceptable degree. You added, ‘I shudder to think of the impact of this realization upon the mind of Asia and Africa, if alternatives are not worked out.’*

Well, whatever the manipulations behind the so-called oil crisis, we have certainly become aware of the discriminatory pricing system upon which the affluence of various nations is built. Our world has been sharply divided into rich and poor nations. The poor, as always, are more numerous. Their restlessness grows. Unless we can find a mutually satisfactory system of pricing manufactures and raw materials, the exploitation of two-thirds of human kind will continue in various ways. The oil situation will persuade

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those of the poor nations who command major sources of essential raw materials that the rich and powerful can be humbled. However, if the gap between the rich and poor widens to an unacceptable degree, if international economic imbalances are not corrected, other weapons will naturally be sought. When we enter this area of mass frustration, anything might happen. But, and this is important, the revolution of science and technology has a built-in leap effect. In other words, those who are already scientifically and technologically advanced advance faster and faster. The challenge before our world is to understand this special nature of the gap between the rich and poor nations, and to work intensively to reduce it by purging affluence of its waste.

45. Tissa Wijeyeratne

Foreign Secretary Tissa Wijeyeratne of Sri Lanka was born February 17, 1923, in Ceylon, as his nation was then called. He studied at the Royal College in Colombo and at Cambridge. While a young man, he lived ten years in Europe, where he was active in the student movement. He returned to Ceylon and began a law practice, then joined the Communist youth movement. In 1964 he joined the Freedom Party, a socialist front formed by Madame Sirimavo Bandaranaike, the present Prime Minister of Sri Lanka. Later he became a member of the Central Committee of this party. After the United Leftist Front obtained an election victory in 1970, he was sent as ambassador to France and Switzerland. In 1974 he returned home to become Foreign Secretary.

On your background: Is it correct that you were born into an affluent family and that your father, Sir Edwin Wijeyeratne, was one of your country's distinguished conservative politicians?
My father was a lawyer turned politician. He was a member of what was then called the Ceylon National Congress. Subsequently he became its president. He entered Parliament. As a Senator, he was Minister of House and Home Affairs and Rural Development. Later on, he became acting leader in the Senate and still later, High Commissioner for Ceylon in London. Finally, he was High Commissioner for Ceylon in New Delhi. So, from early childhood, I had a fairly easy life, financially speaking. This had a slightly deleterious effect on me, for I was not as interested in educational matters as I should have been. When I got to London, however, I met with a large group of Indian students, who were all very conscious of the antiimperialist struggle. Through them I came in contact with Marxist literature. After some time and considerable reflection I joined the student section of the Communist Party of Britain alongside my Indian colleagues. I had occasion to travel in most of the Eastern European countries and I also went to the Soviet Union. I visited China on two occasions, the first of which had a profound impact on my views and my life.

*Essentially, you went to London to study?*

Yes. Curiously, it was the custom of the affluent families in my country - who were, of course, colon-oriented - to send their children to be educated in Britain. It was one of the accepted norms that one became a gentleman if one spoke English with a proper accent, acquired the social graces and values of an Englishman, and went back into the tropics to try to pattern ourselves as closely as possible on the values of the ruling class. By a curious paradox, I was taught to ride horses while there were very few in Sri Lanka. I learned to speak almost impeccable English - a language ninety percent of my people do not even understand. I was introduced to a level of English society which tried to make of me a worthy member of the ruling class in my country, as they did to their own children in theirs. We were supposed to turn out as brown Little Lord Fauntleroys. That all these efforts failed despite my twelve years as a student in Europe is to some measure a tribute to the success of the antiimperialist struggle in Asia, to whose ideals and perspectives we learned to subscribe.

*How did this period in Europe affect you psychologically?*

A continuous conflict now curiously exists within me. Sometimes I find life easy. I even at times succumb. I can well appreciate the exquisite beauty of a horse in movement when I occasionally watch a polo match. But then, suddenly, the horror of all this dawns upon me, and my mind turns to the shocking dilemma of the impoverished peasantry in Asia, who far from

*Willem Oltmans, On Growth Two*
appreciating the sight of a horse in motion, do not have enough food to survive on
for the week, and have to feed three or four children as well. This guilt complex, as
it almost were, continues as a permanent struggle within me. I know the same goes
for most of my colleagues who were for long periods in Europe and who have gone
back to politics in Asian and African countries. Often when we meet we have
discussions on this very personal aspect of our lives and the extent to which we have
to remind ourselves continuously that our primary loyalties and obligations are to
the ninety-five percent of the peasantry we have left behind in our respective countries.
As opposed to that is the soft life one encounters in Europe in the context of the jobs
we fill now.

Like being ambassador of Sri Lanka to the Quai d'Orsay?
I divide my life here into two parts. First there is the political part of the work as
an ambassador and secondly there is a considerable amount of economic activity as
well. This I find a stimulating intellectual challenge. Curiously enough, Paris is a
window, not only to Europe, but almost to the whole world. Here, from Paris, you
study all of Europe. From here you understand the Atlantic Community. It is Paris
which on behalf of Europe speaks for all the Mediterranean. It is through Paris that
you have a window into the Soviet Union. It is from Paris that you Europeans have
an insight into the Far East and Mao. Paris is in a sense still the principal nerve center
of political activity.

What of your social life here?
From the vantage point of my job it has been a fascinating experience to be here
a couple of years: being able for instance to discuss with Huang Cheng, the Chinese
ambassador, now in Washington, with Madame Binh, porcelain-like in the delicacy
of her beauty yet like granite in the content of her political utterances, or with a
political exile like the most intelligent Madame Dewi Sukarno. Separate from such
fascinating encounters one has to go through the dull, tedious aspects of social life
in the diplomatic service, where one is expected to talk ceaselessly, chatter senselessly
on a large number of quite irrelevant topics to a constant stream of people. Perhaps
I enjoyed doing even this for the first three months, because everyone was new and
I sometimes felt as if the pages of Time magazine, or Soviet News, or Peking Review
were coming to life next to me. Quite unexpectedly one found oneself talking to
Richard Nixon at Charles de Gaulle's funeral, or later, on occasions to Haile Selassie,
Madame Gandhi, the Queen of the Netherlands, King Feisal, or the Emperor of Japan.
Except as an am-
bassador, I would not have had these opportunities. But amidst all this I have always hungered for the life of a full-time political activist in the rural areas of my island home. This has made me very restless here.

**To return to Asia: Maoist thought stresses social contradictions as a deep force in a continuing revolution.**

Man is perpetually purifying himself either of his mistakes or of his social connections. A person who claims to be a socialist must continuously cleanse himself of his middle-class, non-working-class and non-peasantclass ideals and associations. He must constantly test his ideological attitudes in the crucible of a remorseless discipline. In the Soviet Union this perhaps happened during the early stages of the upheaval, but then, in the USSR, there was a swift insurrection rather than a revolution. In Russia power was captured quickly. As a result, the true, real Communist Party of the USSR, in my opinion was born after the revolution.

**And China?**

In China, the Red Army, which was Communist, created the revolution and is now building a Communist society. Therefore, I would say that in the Soviet Union there has been an ossification of the bureaucracy followed by corruption at the top. In Peking you do not find for instance a situation where Mao would have been presented with a super Cadillac de luxe by Richard Nixon.¹ For us, as Asians, these are symbols reflecting the social values of the ruling elite of a particular country. If you are a Communist, then you establish your roots in a proletarian and peasant society. If you are not a Communist, then you represent certain other interests. I will not say explicitly that the revolution has been totally betrayed in the Soviet Union but it is obvious that there is now some putrifying of a bureaucracy enjoying power without the checks of criticism and self-criticism.

**Would this development apply to China?**

No. I believe that Mao, on the other hand, is carrying on this continuous revolution to cleanse the cadres of the Communist Party. But perhaps even the Chinese party will eventually run into difficulties, because the same individuals continue to be members of the Communist Party Central Committee indefinitely. The same persons continue to be members of the Political Bureau. Thus an aristocracy comes into being. The moment this happens, people outside this charmed circle will be a little frightened to launch criticism.

Perhaps you recall the story of Nikita Khrushchev, when he read his

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¹ Willem Oltmans, *On Growth Two*
de-Stalinization report to the Soviet Party Congress. A voice in the audience said, ‘If that is what Stalin did, what were all of you doing during this period?’ There was a hushed silence. Khrushchev got up and asked, ‘Who asked that question?’ There was no reply. Then Khrushchev said, ‘Well, we did what you are doing now....’

*What is your solution?*

Unless there is a situation where members of a Communist Party Central Committee will not be allowed to hold office for a specific period of time, say five or seven years, whatever the period may be, after which fresh blood must be introduced, you will find in all these countries the slow corrupting influence of power permeating into the minds and habits of men in the Central Committees. We see on the one side the dedication to and the carrying out of an ideology; on the other hand, we are faced with the reality of the unchecked use of power. Somewhere between these two a socialist solution must be found, since in my opinion, Marxism has now become pantheistic.

*What do you mean by that?*

Originally, when we were students, there was only one Stalin interpreting Marx and Lenin and one ‘Mother’ Communist Party. Then, as in the Roman Catholic Church, the schism came. Mao's interpretation of Marxism is absolutely correct, but only for China. Tito's interpretation is absolutely correct, for Yugoslavia alone. The same goes for Cuba. Castro's interpretation of Marxism is correct, yet confined to Cuba. And in the same way, Brezhnev's interpretation of Marxism is correct, but for the Soviet Union. We know now the Togliatti thesis of polycentrism. It is as though there were many angels, each claiming infallibility in interpreting your Christian Bible.

*As we see around the world many varieties of ‘democracy.’ Would you say that a system in which the people choose - in principle, that is - a new set of politicians every four years is a healthier state of affairs than one in which a Central Committee of a political party consists of a clique that has been there for years?*

You and I, who were nurtured in the cradle of a European intellectual environment, tend to think that democracy means parliamentary democracy and an individual's right to exercise his vote. This is a luxury, of course, that underdeveloped economies cannot afford. It is definitely not the manner in which democracy should express itself in Asia, because the ruling elites would simply use their money to manipulate electoral campaigns. And in the
end there would be no real mass participation, which after all is the essence of democracy. *Demos* and *kratos*, the power of the masses, the power of the majority. You do not get that in Asia.

**And India?**

The ruling elite merely corrupts the ballot box. The vast masses do not participate. This after all is a totally different concept of democracy as conceived in small social-democratic units like Sweden, Denmark, Norway, the Netherlands, or Switzerland. In some underdeveloped economies, take Egypt for instance, surely there is a higher level of political democracy now under a one-party system than there ever was with a so-called multiple-party system loaded with corruption in the days of King Farouk. Therefore, if you accept my line of argument, also in my own country, Sri Lanka, there could be much greater mass-participation under a new system of government than there is now with a series of endless, useless mutterings of speeches that passes for parliamentary democracy.

**And Sukarno’s concept lying between liberal democracy and one-party rule, when he coined the phrase ‘guided democracy’? He believed in ‘nasakom,’ welding the three mainstremas in his land - nationalism, religion, and Communism - together.**

Sukarno is the only true hero of modern Indonesian history. He welded a vast nation of thousands of islands together and created one solid nation, one people. That is his greatest contribution, not only to Indonesia but to all of Asia as well. Sukarno was not an Indonesian leader alone. Like Banderanaike or Allende, Nasser, Nehru, or Ho Chi Minh, he was a proud and powerful symbol of the Third World. ‘Guided democracy’ might well have been a solution for Indonesia. But I disagree on some other fundamental points, as I have disagreed in the many discussions I had here in Paris with Madame Dewi Sukarno on this subject. She is of the opinion, it seems to me, that Sukarno could have gone a little slower. I disagree. I put it another way.

**Such as what?**

Once Sukarno had decided on certain perspectives and goals, I believe that he failed because he did not take his people totally and completely into his confidence by arming them to enable them to defend the perspectives he had set for them.

*Sukarno abhorred bloodshed. He was desperately trying to achieve the goals of the Indonesian revolution by peaceful means.*
Yes. But look at what eventually happened. He met with almost the same fate that Allende did in Chile. Once Allende had decided what his goals were, and once he was moving toward the achievement of those perspectives, then he should have firmly decided as to who were his friends and who were his enemies. If Sukarno had certain objectives in view for the future development of Indonesia, why at a given moment did he not transfer power completely to the people so that they would keep him and his ideals in power? Events convince me now that there is an enormous amount of truth in Mao's statement that political power talks through the barrel of a gun. That, Sukarno ought to have known. The fact that his thoughts are being crushed is precisely because he did not use weapons to safeguard himself. Instead, these weapons were employed by Indonesian fascism to liquidate him. What I am saying is that Allende is dead because he, too, did not use weapons to defend himself. He was massacred by the very weapons which he himself should have used.

You can play bourgeois democracy all the way and lay total emphasis on the ballot box. One of the two. It depends on the political leadership itself. You have to choose between bourgeois democracy on the one side and people's democracy on the other. Or to put it another way, choose between the 'weapons of argument and the argument of weapons.' The first technique keeps the bourgeoisie in power; the second hands over power to the people.

How do you view the race going on between the systems in China and India right now?

Frankly, I do not believe there is a race at all. In my view, the political and economic situation in India is stagnant. China is in the race. India is still at the starting point. It is still using this experiment we call 'ballot-box democracy,' but no one seems to analyze whether the expression that we use is applicable to India or not. People speak of India as the world's largest democracy, but few of you realize that so many of those humble, poor voters in Asia can be bought. One can purchase, after all, for a few rupees, the vote of an impoverished, hungry, and broken voter. The amounts of money spent on electioneering in Asia are enormous and the results quite chaotic. I have been told that a million rupees once passed to rally certain votes in one electorate in India. What is democracy, parliamentary democracy, under those circumstances? It is actually the buying of a commodity on behalf of the ruling classes, who play politics at their level. The elite have purchased votes from the masses in order to keep those very groups from participating in the political process for yet another five years.
Therefore, this question of comparing China and India is a false premise. Not irrelevant, simply false.

So you consider the Chinese experiment impressive?
China is inspirational. Incidentally, I believe that Western imperialism - and the Japanese, without intending to do so - accelerated the Chinese revolution by decimating the national bourgeoisie of China. Initially, this class - most of them tutored in American and European universities - played a heroic role in the antiimperial struggle; as a result of this, tragically for them as individuals, they were discovered by the West and by the Japanese and destroyed. This left the Communist Party of China with a predominantly working class and peasant base.

What about the leaders of the Asian nationalist movements today?
Remember that ninety percent of the upper class that emerged as political leaders in Asia during this century were those who returned from universities in Europe. The majority of student leaders from Asia who were contemporaries of mine went back with socialist oriented ideas and joined their respective Communist or Socialist parties. To some extent, we inspired the workers and peasants to fearlessness, as they were looking for a party and a confident and literate leadership to represent their interests. But so many of our class overstayed our presence in the Communist and Socialist parties of Southeast Asia.

Surely there are many Marxists from the elitist groups you refer to still occupying positions of leadership in the revolutionary parties of Asia.
It is in the interests of reaction that the leadership of these progressive movements be retained by affluent professionals and political adventurers playing and talking revolutions over evening cocktails. So many of these Asian Communist and Socialist leaders still live, eat, dress - and when they go to sleep, talk in their dreams - in English, French, or Dutch! It is this staggering cultural and economic gap between them and the mass of our people that prevents the development of a true national liberation and socialist movement. The progressive movements of Asia must eventually liberate themselves from this accretion. What I am trying to say is that however deeply read and learned we were in our textbook knowledge of Marxism and Marxist writers, we were not really revolutionaries. We were merely radicals. Shouting revolutionary slogans on May Day did not make us revolutionaries. For that we would have needed the experience of the Red Army in the long march in China. Therefore, in an ultimate sense, we were
only intellectuals belonging to the intelligentsia. Asian revolutionaries will be born of those who want a revolution in order to better their economic conditions. To them the revolution has a deep personal meaning and reality. We, the intellectuals from outside these class groups, will not be the custodians of the revolutionary struggle. That inheritance must devolve on those who benefit most by the revolution. My own class will surely be liberated spiritually and intellectually by the revolution. But the leadership must be taken by and belong to those who will be liberated economically and totally by the struggle. Experience will help their own personalities to flower and the peasants themselves will produce the intellectuals of what, after all, is their own movement.

*What role do you predict for elitist groups in Asian politics?*

I can answer that question by taking the example of my own country. In Sri Lanka we have the highest level of literacy in all of Asia. By 1977, sixty percent of our population will be under thirty years of age. Most of them are the children of the peasantry who are now schooling themselves through universities by the flickering light of coconut-oil lamps in village huts under conditions of incredible poverty. It is from groups such as these that the true leadership of the Third World of tomorrow will be born. Our group, the Western returned Socialists, are a curious, eccentric, and passing phenomenon in an Asia during the immediate aftermath of colonialism. Our task now is to strive to erase ourselves as a class from Asian society and acquire in the process the experience and wisdom of a peasantry in the process of liberating itself and us as well. This, I think, is a noble goal, a really noble perspective, if we can fulfill it. The task is stupendous. That is why so few of us have really succeeded and so many of us, myself included in this second category, fail.

**Eindnoten:**

1 Typical of the atmosphere at UN headquarters, in the opinion of the interviewer, was that as soon as the People's Republic of China was allowed in at the UN, the Chinese chief delegate got himself an air-conditioned Cadillac: the classic status-symbol of all permanent representatives in New York, even those who represent the least affluent nations. They all see to it that their governments finance the largest limousines available in the United States, comparable to those used at the White House.
46. Mohammed Kassas

Professor Mohammed Kassas was born July 6, 1921, in the fishing village of Borollos in the Nile Delta. He studied at the University of Cairo and obtained his doctorate in biology at Cambridge. From 1964 to 1968 he lectured in biology at the University of Khartoum in the Sudan. He is assistant director-general of ALESCO, the Arab League Educational Cultural and Scientific Organization. He is vice-chairman of SCOPE, the Scientific Committee on Problems of the Environment, a member of the Egyptian Academy of Sciences, and a member of the Club of Rome.

What about the ever-growing population of Egypt?

We represent a present-day textbook example of an overpopulated country. The population of Egypt is increasing at a rate of almost 2.8 percent, which is equal to almost one million a year. In 1973 we added 900,000 persons to our population. In 1850, some hundred years ago, we counted five million people in Egypt. These people were cultivating five million acres of land, or an average of one acre per man. That is why we talk about the good old days. Today, Egypt has forty-five million people cultivating only seven million acres of land, which actually means every Egyptian has less than one-fourth of an acre per head, per capita. This is our situation today and this is why we would have to do two things.

We need to expand as much as we can into the desert. Less than 3 percent of the land area of Egypt is irrigated and cultivated. Ninety-eight percent of our country is desert. This is our situation: We are dry, short of water, and our rivers used to empty two-thirds of our water resources into the sea. Therefore it was only natural that we planned how to conserve some of this
precious water. That is why we have been building dams and reservoirs ever since the nineteenth century until we built the Aswan Dam to close up the Nile so that it would conserve our total supply of water. We have numerous projects at present to further save water and bring into cultivation as much land as possible in our western desert since this is the only way to help solve our food problems. We need more and more to intensify our agricultural productivity. We need to use ever more advanced scientific methods of production so that we will harvest more and more from this very limited land area. We estimate that Egypt could cultivate, by using all modern means at our disposal, about eight million acres. This would mean that we could only use 3.5 percent of our total land area for food production. The rest is to remain desert.

Forever?

Indeed, forever. There is only one possible exception. That is if mankind would have the good sense to spend enough funds for scientific research on cheap technology for the desalinization of sea water. If the world would really study the problems of turning sea water into fresh water instead of spending all those billions on armaments or space research, we could solve this problem. We could, for instance, conceive of a chain of desalinization stations all along the Mediterranean coasts or along the Red Sea coasts of Egypt. We could be pouring fresh water from the seas into the Egyptian deserts. If this dream would come true, it would mean a breakthrough for our agriculture. And certainly not only for Egypt, but for the entire world.

If such a solution is not found, it eventually means disaster for a country like Egypt. We would have to try even more to develop industry and then try to buy our food from the outside world.

More industry would multiply Egypt's problems.

Yes, but this is the situation. Nations like Egypt have few options to choose from. If the United States discovers another oil field, it has the option either to start developing it or to leave it for future use. The Americans can get oil from elsewhere in the meantime. But if a poor nation, like Egypt, discovers an oil field, a coal mine, or a phosphate mine, it has no option but to develop them. Poor people have little or no choice. The rich nations have all the options: that is one aspect of the present world situation.

What can one do about Egypt's population problem? There are more people and less food in production.
It is regrettable that the Egyptian government has not come out and stated openly, ‘This is our policy: we are in favor of birth control.’ Except, perhaps, in 1968 or 1969 when some statements to this effect were finally made.

Religion stands opposed. I recall that President Sukarno of Indonesia was very much against birth control, perhaps unwisely so, but on the basis of Islam as well as on the premise that some large islands of Indonesia, with the exception of Java, were underpopulated.

I do not think Islam is opposed in this case. Islam, like most religions, is against the killing of living souls. Islam would certainly be against any form of abortion. But if there were plans for family planning, other than abortion, Islam would have nothing against it. But, in any case, over the past two or three years the population increase in Egypt did drop from 2.8 to 2.4 percent. This means a substantial drop, which is a healthy sign. Also, in the Egyptian villages deep within our country, women are becoming increasingly interested in the process of family planning. Men are not. Men are much more conservative. Women are progressive in Egypt. It is a pleasure to watch the women in rural areas flocking to our family-planning centers. I do not really understand why men resist these needed and useful developments. With men, perhaps, traditional feelings are still standing in the way. But we in Egypt are slowly moving in the right direction in this sector. It will take some more time, because these things cannot be changed overnight. Both government and nongovernment agencies are now working on these problems.

I understand that some 350,000 acres of land will now be irrigated because of the Aswan Dam. But are there ecological aftereffects from this enormous change man has brought about in nature?

In the early 1900's, the water that was entering Egypt at Aswan was, on an average, some 3,000 cubic meters per second. Southern Egypt was using 450 cubic meters per second. In northern Egypt, the entire Nile Delta was using 550 cubic meters per second. Therefore, the total water consumption of Egypt in those days was about 1,000 cubic meters per second, which equaled one-third of the water that was reaching Aswan. Two-thirds of this water, or some 2,100 cubic meters per second, poured into the sea. This was the situation in Egypt prior to building even the first Aswan Dam, in 1903. Then, a series of reservoirs was constructed all along the Nile. The present High Dam is only the last major construction in a long series, the climax in a
lengthy chain of schemes. Now, the river Nile has been sealed off. Egypt is getting water and this water is irrigating an additional one million acres of land.

**How much is this in relation to Egypt's total?**

One-sixth. Egypt cultivates six million acres, to put it simply. We are now adding one million. Three-quarter of a million acres of land are irrigated by what we call basin irrigation, in which the harvest represents one crop a year. Our new water reserves enable us to transfer this three-quarter of a million acres of basin-irrigated land into what we call perennially irrigated land, which means we can harvest more than one crop a year.

The High Dam is saving us in many respects. In 1964, the year in which we completed the main structures of the dam, the river flood happened to reach such unprecedented heights that had it not been for the dam the city of Cairo would have been drowned in one or two meters of water. This had never been recorded in the history of the river. In 1964 the High Dam saved Egypt from drowning. In 1972 and 1973, on the contrary, the waters of the Nile reached unprecedented lows comparable only to the lows of 1913. This has occurred only about twice in some one hundred and fifty years.

**Did this lack of water relate to the current drought in the Sahel region and in central Africa?**

Probably so. The water usually originates in Ethiopia, which is also facing severe drought. If, in 1972 and 1973, it had not been for our High Dam, again, the situation would have meant disaster for Egypt. We would not have had the necessary water to cultivate our lands this year.

Now, when you have a scheme of this magnitude you have to expect a series of by-products. For instance, the question of silt. During the flood season, the Nile used to spread, in July, August, and September, billions of kilograms of silt over the land. This added lots of fertilizer - potassium, phosphorus, and nitrogen - to the land, and improved the structure of the soil itself. It was collected on the banks of the Nile and people would make bricks from it. Almost ninety percent of all building material in Egypt came from there. But the High Dam stopped this constant construction of silt layers. The soil in the fields lost the benefit of this silt stream and the building industry lost its main sources of materials. On the land, we would have to compensate for this loss of silt by adding more fertilizer. This means that Egypt now has to import more and more fertilizer. This did not happen before. But here we are: we now import some three hundred million dollars' worth of fertilizer each year.
Another factor, I should mention that is caused by switching from basin irrigation to perennial irrigation is the sharp rise in bilharziasis. This infection increased from perhaps one or two percent in the past to sixty or seventy percent. In other words, you increase food productivity by supplying more water and save the lives of a hundred people by solving the problems of hunger, but at the same time you cause death of perhaps five or six people through the spreading of bilharziasis. It seems there is no other way out.

Then there are the questions raised by the so-called Nile Cascade Project. A number of dams are now in construction all the way from the Aswan Dam to Cairo. These dams have to slow down the water coming down toward the sea. Of course, they will provide hydroelectric power and thus supply electricity to villages in those areas. However, the new dams cause additional problems. I myself was born in one of the villages right on the edge of the Nile Delta. When you deprive that entire area from all the silt and water that is now being held up, it means that you are exposing the shoreline of the Nile Delta to erosion by the sea. This is what is happening now. Before 1900 the Nile was building, let us say, one unit of land while the sea, at the same time, was eating away 0.4 of a unit of this land. At present, the sea is still eating away 0.4 of a unit of land, but the river is not building new land anymore. The net result is therefore that the delta shore is receding by about 0.6 of a unit of land per year, and thus the Nile Delta is being eaten up by the sea. This means among other things that villages on the shore line, whether they are fishing villages or summer resorts, are gradually losing parts of their land. Egypt is facing up to this problem. We already have a team of United Nations experts in the field researching this question. We have to find ways to protect the Nile Delta from this constant erosion. It is the more serious because the delta, up to its middle point, is no more than 1.5 meters above sea level. If the coastal areas are further destroyed, then what I describe as manmade marine retrogression will occur. What I mean is this: There are still strips and narrow bars of land that separate the delta from the sea. If these bars, these natural barriers, were to be destroyed, the entire delta would face a grave danger.

In view of the enormous amounts of money needed in Egypt and other African lands for development, perhaps some of the tens of billions of dollars now flowing toward the Arab Gulf states could be recycled toward these goals.

Certainly, steps are being taken through the Arab League and through inter-Arab banking organizations to develop capital that would be available for such purposes - in the Arab world as well as in Africa and Asia. But first
let me point out to you what agricultural potentials there are in our region of the world. The Sudan alone, if developed properly and systematically, could feed the entire Arab world. Sudan's land is tremendously favorable for agriculture. While I was speaking for Egypt in terms of adding some one or two million acres to its agricultural potential, the Sudan could easily raise its production to over 250 million acres. All it needs is capital investment.

*One would be inclined to feel that Arab oil sheikhs should channel their unexpected fortunes into the direction of the Sudan, for instance, instead of becoming nouveau-riche landowners in Kentucky or buying up buildings on the Champs-Élysées.*

There are three nations with important agricultural potentials in the Arab world: Sudan, Iraq, and Syria. Of course, Morocco and certain parts of Algeria and Tunisia also possess significant agricultural lands. But, you see, the Sudan, for instance, is underpopulated. It is, furthermore, a poor nation with no capital surplus at all. Machines could compensate here for a shortage of labor. In my own country we have now discovered, for instance, that we have phosphate deposits in the middle of the oasis area of our western desert. They could very well be one of the largest phosphate deposits in the world. But to develop them we would need large-scale investments of development capital. With the present shortage in fertilizer in the world, these phosphate deposits could be very important. But for the next fifty years, Egypt may not have enough capital to begin the exploration of these deposits on our own. Here is a chance indeed for oil money.

*Let me turn away from food and agricultural problems and ask you about the flower of the Arab world - your youths. What is their present situation?*

Young people in Egypt are harassed by pressures of extreme competition.

*No jobs?*

Not only no jobs: I am speaking of their life in general. Out of every 174 children going to primary school only one will go to the university.

*Why is that?*

Because there are no places available. A child at the age of six goes to primary school for six years. Then he passes an exam and moves to a second phase, called intermediate school, which takes three years. Then he goes to another three years of secondary school, gets his baccalaureat or second school certificate. Then he enters the university. During all these phases, there is fierce competition for the limited space available. Last year we had...
175,000 students who obtained a secondary-school certificate. But universities and other higher education facilities had only 50,000 places available to them. What this all means is that boys and girls from the time they enter primary school at the age of six, are engaged in intense competition step by step. This situation surely influences their attitudes.

As in many other countries, in Egyptian society when a man or woman is not a university graduate, he is hardly a truly respected citizen. Of course, this is entirely wrong. I am hardly defending this situation, but the reality is that everyone aspires to enter the university and obtain a degree. But in Egypt today a busdriver often receives better pay than a university graduate. Many of the workers in our new industries are receiving better salaries than university educated persons.

That sounds like the Soviet Union.

That is the situation as it is. Yet, social pressures and factors of prestige continue to urge people to send their children to school, because they still dream of obtaining a university degree. This must be changed. And in some measure it is changing, but much too slowly. Our population is increasing so fast that the social changes needed move too slowly to meet the problems created by more and more people.

And once out of the university, there are no jobs available?

That is true to some extent. Our government has taken the responsibility of giving all university graduates jobs. In practice this means that everyone receives a salary at the end of the month. But it does not mean that everyone receives a job befitting his experience or education. People are technically and professionally employed, that is all.

How could Arab oil money be used to lighten the burdens of Arab youths?

Something could be done about the educational system. The main thing is to create a true process for personal development. We do not need to just hand them money or give them things. We really need to find proper places for our youths in society in order to turn them into productive members of society and not just consumers.

But there are also ‘limits to growth.’

Of course, we can speak of our physical means of development, which are bound to limits to growth. But then there are many social, political, and cultural constraints that are also severely restricting the full development of available resources. And those who have the capital for development do not
always use the available money as rationally as they should or as we want them to. I often think of the wise man who said that the nineteenth century was the century of the great discoveries in natural history. The twentieth century became the age of the great discoveries in physics: steam, electricity, and nuclear energy. The twenty-first century will become the epoch of great discoveries in human psychology. It will be the era in which we come to understand the brain and the behavior of man.

Could such knowledge save man?

At least then we could understand our actions. Rich people with lots of oil spend their fortunes not on development, but on Rolls-Royces; or worse, on armaments, bombs, and showpiece battleships. If the Arab World would achieve a genuine peace, we would be much more rational in our attitudes and much more rational in the use of resources and capital. Egypt has been spending over the last twenty years an average of one thousand million Egyptian pounds a year. This means that Egypt could have built with this money three Aswan dams every year during those two decades. This is the sad situation. It is irrational, but here we are. That happens when a nation finds itself in a political web and has no option. If I were in the position of the present leadership of Egypt, I would not act differently. What can we do?

Yes, but nations like Bolivia, Peru, and Argentina, to name a few, are not at war, but nonetheless buy for outrageous amounts of money armaments from the rich countries. The Stockholm International Peace Research Institute is demonstrating this eloquently in a constant stream of studies and reports.

Indeed, this is the problem.

It is insane.

Of course it is. It is, however, one definite aspect of our modern society. How to understand human actions?

Let us hurry toward the twenty-first century and find out how the brain works.

If we do find out, then we can say that there are no limits.
47. Mahdi Elmandjra

Mahdi Elmandjra was born March 13, 1933, in Rabat, Morocco. After graduating from the Lyautey High School in Casablanca, he went to the Putney School in Vermont and to Cornell and the London School of Economics. He then obtained a doctorate in law at the University of Paris. He began his career as a diplomat in the Foreign Service of Morocco and became an adviser to the Ministry of Foreign Affairs. In 1961 he joined UNESCO in Paris, where at present he is assistant director-general for preprogramming.

No one has analyzed the management of the United Nations as critically and thoroughly as you did in your book, The United Nations System: An Analysis. Are you satisfied with the way the UN operates at this point in time?

I do not think that anyone who believes in the perfectibility of institutions can ever be fully satisfied. There is, no doubt, great room for major improvements in the UN system, but these cannot come about without important changes in national attitudes toward international organizations. In the meantime, the UN system is a mere reflection of the prevailing trends in international relations, which are dictated by national options. One of the main values of the UN system is that it represents a world forum where views can be exchanged with the hope that, through dialogue, one can prevent major crises as well as contribute to the molding of an ‘international public opinion’ dedicated to the universal aims of the UN Charter.

But take, for instance, the special session in April, 1974, called by President Hourari Boumédiene to deal with problems concerning natural resources.
Eighty-eight government leaders traveled to New York, delivered their speeches, and left. Some considered this a disaster and an insult to the intentions and aims of the conference.

No one expected from this extraordinary session of the General Assembly that after two weeks of speeches there would follow some sort of miraculous transformation in the entire international system. But the fact that this extraordinary session even took place is most significant. It has clearly demonstrated the awareness in the developing countries, as well as in the developed world, of a deep crisis in the present structure of the world system. We will have to take time to reflect upon those eighty-eight speeches, while - and this is often not sufficiently stressed - no doubt behind the scenes a lot of useful contacts have taken place which are not publicized at all. In my opinion, this conference has forced and will force a lot of people to think within new and different frames of reference.

You are stressing the importance of ‘invisible diplomacy.’

I think, and this was reflected in some of the speeches delivered by representatives of the developed world, that more people now accept the need for some change in the existing structures of the world economic system and more particularly in the type of international relations that still prevail.

As a journalist I have attended some twelve sessions of the General Assembly of the United Nations. The numbers of words uttered in the halls of that building ran into the billions. Is there no way of speeding up these proceedings? The world is in a hurry; the problems faced by mankind are magnifying.

A lot of thought is given to these problems. But international assemblies are often considered places where certain national viewpoints are directed to national as well as to international public opinion. It is like when any national politician speaks as a member of Parliament with a clear eye on his constituency at home. But still, all this serves to prepare the ground for various decisions. Some of them are being taken by the technical committees of the General Assembly, while others are being worked out by silent diplomacy, as I said earlier. But I would be prepared to say that the conference on raw materials, which took place in New York in April, 1974, represents a major evolution in the type of international relations that the world so far has known.

Do you view the Stockholm Conference on the Environment, in 1972, and

Willem Oltmans, On Growth Two
I think we are witnessing what is being called ‘the globalization of problems.’ In other words, there is an increasing number of problems which nowadays have acquired a universal dimension. They can only be effectively met and handled through international arrangements. Problems of the environment, world population, the seas and oceans, food and energy; even problems concerning human ‘settlements,’ as we call them today, all these questions cannot be resolved by the allocation of large sums of money within the framework of national decisions. Everyone now seems aware of this. A transformation is occurring in the concept of national sovereignty. People are admitting that they have to rely on new forms of international regulation.

Aurelio Peccei calls this a new concept of the sovereign state in relation to global interdependence.

The new concept of interdependence as eloquently expressed by the Club of Rome and Aurelio Peccei is too often mistakenly interpreted. Some take it to mean that it should signal a radical transformation toward an immediate world government. This is not what it meant at all. What interdependence means really is simply that at the national level there is an awareness and recognition that certain types of problems require a more intensive form of international cooperation and that therefore these questions could be delegated, perhaps even in part, to international forms of decision making. This has now become indispensable, as a matter of fact, even as a condition for the survival of the nation-states. National sovereignty would eventually become meaningless without this delegation and acceptance of certain powers at a global level.

One could say that we are watching at present a kind of mutation in the very concept of national sovereignty, whereby certain attributes of sovereignty on the national level that perhaps were still considered indispensable a few years ago are no longer felt as essential. This happens because it is realized that no nation is able to face some of the present world problems alone. Take any example. For instance, inflation. I think it is fully recognized nowadays that no single country can solve the problem of inflation on its own. Problems must be tackled internationally, globally. How this must be done, no one can supply a proper answer as yet, but at least there is this recognition that more and more problems need to be studied at the international level. Our solutions should be solutions with an international character, acceptable to all.
Why is it then that when the world faces a military conflict, as in October, 1973, in the Middle East, within days the United Nations dispatches an emergency force of soldiers to the endangered area, but when there is a war situation in the African Sahel region, where hundreds of thousands of people are threatened with famine, the world is unable to effectively lend aid. ‘Transport problems,’ Addeke H. Boerma told me. But I know of one air force that had enough planes to contaminate one-third of South Vietnam with chemicals and send hundreds of planes to destroy even the smallest villages in North Vietnam.

I do not underestimate the importance of the Sahel problem. However, it again raises the question of the global interdependence of such problems. The food problem in these African countries is difficult to solve, because the necessary infrastructure in terms of transport is most inadequate.

Another angle is likewise of paramount importance, and I am not raising this question because I am connected with UNESCO. But, nevertheless, if there were a higher level of education in areas like the Sahel countries in Africa, it would be easier to develop efficient methods of aid, to get the local population involved in a larger scale in the distribution of food that is flown in. Also, if developments in science had progressed further, we would have had available more reliable weather-forecasts about climatological conditions, which in turn could have assisted in preventing such calamities. Which brings us back to the point I brought up before, that no single country alone is capable any longer of resolving these problems, since everything is becoming closely interrelated.

In some of your speeches you have stressed what you called ‘le nationalisme des disciplines scientifiques.’ Nationalism in science likewise seems absurd in this day and age.

What I meant by this ‘nationalistic’ approach to the sciences was that we should not limit our viewpoint to specific disciplines alone. I believe that the former boundaries between disciplines in science are gradually disappearing. In their interdependence, the present-day world problems we are dealing with require numerous specialists and technicians from all fields in order to find solutions. The need to recognize the complementarity of the inputs of the most varied scientific knowledge has become indispensable. That is what I meant by saying that we have got to work toward interdisciplinarity. Of course, no single scientist could be competent in a large field of sciences, but what is definitely needed is at least the recognition on the part of some scientists that their work is closely related to the work of other scientists in other fields. This already would be a big leap forward. In fact, most modern
institutes are already basing most of their research on the inter-disciplinary approach.

*It was an Algerian, Abdelkader Chanderli, who stressed in our interview for this volume the scandalous way in which technically advanced nations are holding on to their patents and technical know-how, thus creating another barrier toward faster development in the developing nations.*

Certainly. The transfer of techniques and technology plays a major part in development. UNCTAD is dealing with these problems. And, indeed, there has been a great reluctance on the part of a number of advanced countries to share and make available some of their technological know-how. This is particularly unfortunate on two grounds: it is unfortunate in terms of economic development, as Mr. Chanderli has aptly explained to you. But there is also another obstacle, which concerns UNESCO in particular. This is the free flow of ideas. It could be easily maintained that the free flow of knowledge should be based on the same principle. One of the main principles of the constitution of UNESCO is the advancement of knowledge. Knowledge should be at the disposal of all humanity without limitations of any kind. This does not necessarily mean that through this sharing of knowledge one would not be prepared to recognize the rights of those who have produced the technological developments or hold the patents. It is a question of redistribution. One could devise ways by which the inventors would be appropriately compensated. But what is happening right now is that the price of such patents is often exorbitantly high and unreasonable. It often becomes a form of monopoly. In various fields straight monopolies exist. In my opinion monopolies of whatever kind are always an obstacle toward the development and welfare of human beings, be they on a national or an international level. This indeed is one of the important issues in the development problématique of the Third World. The developing nations should have complete access to the technological know-how of the advanced nations under reasonable conditions.

*What about the field of education as related to communications?*

When speaking of the area of communications, we have to distinguish three aspects. First, there is the area that could be called freedom of communications. There has got to be a minimum amount of free flow of ideas as laid down in the constitution of UNESCO, as well as in the Declaration of Human Rights. Our second question is the problem of the fair distribution of this flow of information. Just as there are certain inequalities and unbalances in the political, social, and economic fields in terms of
distribution of power, you have the same thing in the area of communications. That is, the flow of communications itself is not balanced. I need hardly dwell on this situation, because many studies have shown that, for instance, in some of the developing countries up to eighty percent of television programs come from a limited number of countries. The concept of a free flow of information loses much of its significance when it deteriorates into a one-way process of communication. The flow of ideas should be more balanced.

The third point I want to raise is of an ethical nature and closely related to this problem of communications. It is the problem of responsibility and of professional consciousness. If one wanted to guarantee a maximum amount of freedom of information, or of a free flow of information, then the generators of that information would have to show a greater sense of responsibility and stop exploiting the media to certain particular ends. Here lies, of course, the perpetual dilemma between freedom and responsibility. This dilemma one finds not only in the field of communications, it is an eternal problem closely linked to the concept of democracy. In the democratic state, all citizens are free, but their freedom should by definition not encroach upon the freedom of the next citizen. Therefore, we are faced with another rather complex and integrated phenomenon when we discuss the process of a free flow of information itself.

Perhaps, against this background of the concept of bringing dignity to our communications systems, we should again consider the increased interdependence of all humanity - what Aurelio Peccei calls ‘the unity of mankind’ - and realize that our world society is in dire need of a new form of global solidarity.

The concept of global solidarity is a most basic one. It is the raison d’être for the existence of international organizations, because people supposedly realize that they have something in common and that certain problems should be approached and tackled in a spirit of cooperation and solidarity. Here lies a very decisive and important role for education. Not in a narrow sense alone, or in the classical sense, but education as a system of schooling as a whole. A new pedagogical approach should be created which would be reflected in all institutions, on the national and the international level. The urgency of certain world problems is forcing nations as well as individuals to develop this more global approach, which by definition requires a minimum amount of solidarity.

It seems that a gigantic global public relations job is needed, somewhat
like the MIT study, Limits to Growth, and its impact on public opinion.

Yes. We do need publicity, information, and cooperation from the media.

It's an educational job.

There is a need for much more of this kind of education in making people more aware of their own existence in relationship to others, both in terms of global problems and in terms of the interest of all humanity. Unless this is achieved, all efforts will be moving at cross purposes. Instead of alleviating the existing problems, we may be creating even more complex ones because of the complexity of human interrelations. Therefore, while we are speaking nowadays of globalization, interdependence, and the international system as a whole, one has to look simultaneously at the other end of the spectrum and also think in terms of other forms of organization which are taking place on a much smaller scale, at a microlevel, at times in a village or a very small group. Here again lies the interdependence between what I might call the macro approach - the international approach, the globalized approach - and the micro approach, which does not leave aside, or which does not underestimate the fact, that after all, we are dealing with the quality of life for man himself, with the individual.

What UNESCO should do now is issue a 'little red book' based on guidelines for each individual on this earth, including the Chinese, to live by.

I think such a book should be drawn up by all hundred and thirty plus members of the United Nations. The day we get all nations to agree on a single prescription of the kind you have in mind, I think we would have solved all the problems of mankind with one stroke. But, seriously, I do think it is encouraging that there is a greater awareness everywhere today of the need for greater human solidarity and of the ultimate interdependence of all problems. Man realizes he sits together with all others in one boat.

Don't you feel, however, that reality is outstripping hope?

No, I do not think so, because I feel that hope is an undeniable part of reality.

Eindnoten:

1 See also, ‘The Moment of Truth Is Coming,’ a twelve-page article by Aurelio Peccei in the December, 1973, issue of the magazine Successo.
48. Addeke H. Boerma

Addeke H. Boerma was born April 3, 1912, in Anloo in the Netherlands. In 1938 he joined the staff of the Dutch Ministry of Agriculture. Following World War Two he became director-general ad interim for food supplies. Soon he represented first the Netherlands, and later all of Europe at the FAO, the Food and Agricultural Organization of the United Nations. From 1951 to 1958 he was director of the Economic Department of FAO, and in 1967 he became director-general of FAO, with headquarters in Rome. It was in his study in the Italian capital that this conversation took place.

The author has included one Dutchman in this series, partly to honor his native Holland, but more because Mr. Boerma deals with the food situation for all of mankind.

For the last few years you have been warning people, whenever they were willing to listen - at the European Council, at the EEC in Brussels, and at the United Nations in New York - stressing that the world food situation is becoming increasingly serious. You have hardly been listened to. Perhaps today people may begin to react.

It is unavoidable that reactions to remarks concerning the world food situation should be slow. To begin with, the rich countries have no idea what this suffering owing to a large-scale lack of food actually means. It hardly happens in their own countries today, although in most of the poorer areas of the rich countries themselves there are still people to be found who do not get enough to eat. Their incomes are too small to pay for enough food.

Public opinion in the world is not sufficiently informed about the
desperate food situation in many countries and no one seems to pay attention to it. It has always been taken for granted that there will be enough food. As soon as there is a shortage anywhere, people start hoarding and then prices are forced upward. In the developed countries people can still cope with the situation. Nevertheless, the world food situation does not at all seem to concern people as it should. Usually, measures are taken when they finally hear on radio or see on television what is happening.

This reminds me of a Dutch television film showing vultures eating human corpses. The film was made for the purpose of collecting money for Bangladesh, and the result was astonishing, for it raised ten million dollars in a single night.

We now see the same thing happening in the famine-stricken Sahel region of Africa. As soon as television started showing pictures in which these people were seen to be actually starving, the world began to be impressed. When large numbers of people are dying, the world begins to worry. That is how people are. When someone like me speaks from a general point of view and warns that things may become even worse, the world quietly waits until the emergency has actually arisen. As long as there is no real crisis, even the most serious warnings fail to make any impression.

You have just mentioned an extremely useful aspect of television if it were used properly.

Indeed. I believe it was C.P. Snow who once said that the world will only become aware of a real emergency situation when people can actually be seen to be dying on the screen.

From the last few days of the Second World War, I remember American and British bombers dropping loaves of bread over the starving regions of the Netherlands. In the Sahel region of Africa an emergency situation now exists. Why has it not been possible for countries which have thousands of warplanes standing idle to use them in sending food to the regions of Africa which are waging war against famine?

I am afraid that one would not be able to organize this. At least, not at the moment. Not with the mentality which prevails. It has only been possible for the FAO to obtain planes to a very limited extent in order to relieve the famine-stricken regions of Africa. These aircraft have been very useful. But the cost of sending planes is booked against a certain account by every Minister of Defense of the countries concerned and they now say that there is simply no more money available. One could say that this is a very remark-
able situation indeed when we see how much money and how many planes are being made available for the war in Vietnam or are being sent to Israel.

*This lunacy was emphatically pointed out to me by the former Secretary General of the United Nations, U Thant.*

Exactly. So when one thinks of this one sometimes becomes rather cynical. The only possible conclusion is that the moral values of people have shifted somehow. Only after overcoming tremendous difficulties were we able to obtain the use of the minimum number of planes needed by the FAO. We have by no means achieved all that we set out to achieve. This year the situation is even worse in some countries than it was in 1973. In Niger, for instance, the situation at the moment is very difficult.

*This may well explain the recent thirty-second military coup in Africa which took place in that country.*

Possibly. It is always hard to say exactly what the reasons may be for any coup, but certainly, when prolonged problems such as famines occur in a country, the germs for radical solutions are already present. Niger is at present one of the Sahel countries facing the greatest problems. After that nation, Mali and Chad are facing important problems.

*Have you ever been bold enough to say, Enough! The situation is too serious. I am going to the President of the United States, who in his capacity as commander in chief has more planes available than some one hundred member states of the United Nations combined, so that at last something effective would be done?*

In practice it is hard to achieve results through such a *démarche*. One should always go through normal channels.

*Yes, but you are the director-general of the FAO and there are hundreds of thousands of human lives involved. This is a war situation!*

One has to be careful in taking drastic steps. One should always prepare oneself thoroughly for such steps, particularly as far as the logistics are concerned. For this is where the problem lies. Naturally, food could easily be flown from America to the Sahel although the amounts of food that are needed might even be too large for air transport. This means that we partly depend on shipping space. Also, large numbers of trucks would be needed to transport the supplies from the ports to the distribution centers. All this takes a lot of time. Moreover, the enormous costs involved in this kind of transport
is easily overlooked. Therefore, let me say this: We have urged many governments to make planes available to us but we did not get the numbers which we would have liked to have had.

*Actually, it is disastrous that an organization such as the FAO is still without executive power.*

We are not yet a supranational organization, nor is this something we can expect to become. At the moment people are not yet prepared to hand over power to an international organization such as ours. The FAO derives its power from the combined members, who arrive at certain decisions at separate moments.

*At one time you proposed the setting up of a World Food Bank, an emergency food supply scheme.*

That is what the Dutch government suggested during the World Food Congress of 1970 in The Hague. The aim was to create a world food reserve which would be financed internationally, meaning that all countries would contribute money or goods to be used for the entire planet. Actually, a similar proposal was put forward by the FAO as early as in 1964. The Dutch simply reactivated this scheme. Nothing ever came of it, because it was impossible to reach agreement on the question of communal financing, in other words how much each country should contribute. This plan for a communal world food reserve has therefore remained pure theory. The difference from what I have proposed is that each country accept the responsibility for its own food reserve so that each country pays for its own food reserve, which is also created by the same country. In doing so, a number of national food reserves would be created which might be coordinated on an international level.

*Is all this to be fed into computers so that we always know how much food is available?*

Indeed. The object would be, let us say, for the richer countries to create not only reserves to cover the requirements of their own peoples or the requirements that are needed by them as exporters of food, but also to create some extra reserves which would be available to help famine-stricken parts of the world. In this connection the poor countries would try to create their own reserves from their own production. In doing so, these countries would most probably have to be helped. Although India managed some years ago to create its own food reserve amounting to nine million tons.

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How do you view food aid to poorer countries?

In creating their own food reserves the poorer countries might either receive direct gifts from the rich countries or else assistance might be given them in the form of financing these reserves. This financial aid could, for instance, be granted by the World Bank or the IMF. The point is that all these activities involved in creating such reserves should be coordinated. We should all decide together how much food there is at any one time and how much is actually needed to ensure that there will be no further great shortages in the future. Shortages cannot be prevented. After all, a particular country may have a bad harvest one year, so that when there is only a small food reserve in such a country, it will be depleted almost at once. This country will then have to be helped by others. The object is therefore to create by means of a combination of measures an actual world food reserve which is not financed internationally, but the financing of which is shared by the countries themselves, and in which it would only be natural for the rich countries to contribute more than the poorer countries.

In 1974, figures were published from which it appears that mankind only has sufficient food reserves to cover a period of twenty-seven days at present.

It is indeed true that when the present harvests will be brought in, there will be only a large enough food reserve to cover a period of about three weeks. This means that the stocks in the United States have gone down very considerably, even to a minimum level. These food reserves should therefore not be allowed to drop any lower than they are at the moment. Nor is there a surplus of food in the world which might be mobilized if anything unforeseen should happen. Naturally, there will be new harvests. At the FAO, we have a department which registers the harvest expectations in all countries. It looks as if these expectations are, as things stand now, in the early summer of 1974, very favorable indeed, with the possible exception of the Soviet Union, from which we receive no direct information. However, a recent publication in Moscow stated that their spring sowing of cereals had remained below expectation, so it is probable that the Soviet harvest also might remain below expectation. Since the Soviet Union produces about seventy percent of its harvest in the spring, it means that this information is very important. But we at the FAO do not know its full significance. Accurate details about the Soviet Union are not known. For the time being we can only go by the news given through Izvestia. Prospects in the United States and Canada are still favorable for 1974, which is not to say that things cannot go wrong somewhere else in the world. When there is a bad monsoon in Asia it probably means a lot less rice will be grown. As the rice production

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in Asia is hardly in step with consumption, and the reserves are also very low in that part of the world, shortages of rice will therefore have to be compensated for by supplying wheat. This wheat can only come from the United States or Canada, or possibly from Australia, where some reserves are still available.

*What would happen if there were a failure in the United States?*

In principle, the result would be the same as if a failure of the harvest occurred elsewhere. The difference being however, that the United States is the only supplier of food reserves to the world at the moment. So if this kind of disaster should happen in America, things would definitely go wrong. Particularly if, at the same time, a similar failure of the harvest should occur somewhere else in the world at the same time as in the United States. After all, this is quite possible. As things are at the moment, the US will have a surplus of ten million tons of cereals in 1974.

*Professor Jean Meyer of Harvard has estimated that 210 million Americans are presently using as much food as would be needed by one and a half thousand million Chinese when keeping to an average diet.*

In the luxury society of the West far more meat is eaten in proportion to cereals. Because meat is very costly in relation to energy, which means in relation to the basis, cereals - large quantities of cereals - are needed for producing all this meat. The result is that in a country like the USA, where large amounts of meat are eaten, relatively large amounts of cereals are used for feeding cattle, which, in turn, produce meat. If the same amount of cereals were to go directly to the consumers, far more people could, of course, be fed.

*According to the available figures, the Americans use 2,200 pounds of cereals per person per year, of which 140 pounds are used for producing bread and foodstuffs. The Chinese have 400 pounds per person per year available, of which 360 pounds are used for producing primary foodstuffs.*

In the rich countries far too many proteins are eaten compared to other areas. After all, people in industrialized countries prefer to eat meat. Against this, we use far too few carbohydrates. In China the main food supply consists first of all of carbohydrates, to which proteins are added. This can be called a healthy diet. In the rich countries, the average diet is far too rich in protein, which means that it is wasted. This surplus of protein is produced with the help of cereals, so that these urgently needed cereals are withdrawn from the world food production.
Have you any hope that we might ever be able to end this what I might call insanity in which certain parts of the planet are using food in wasteful and unreasonable quantities whereas other regions go on starving? How much do the domestic animals alone consume in the rich countries?

I must honestly tell you that I do not know. I do not know to what extent public opinion in the rich countries might be educated.

Don't Christians always talk of loving thy neighbor? Where is their solidarity?

I'll tell you again, the necessary solidarity may only start dawning on people when they see with their own eyes their fellow men dying on their television screens. Possibly, people will only then realize what is actually going on. At the moment the famines are still too far away from their immediate environment. An accident at the corner of the street where they live - this is what still impresses them first of all. When they read about it in a newspaper, it is already less hard to bear for them, and when they hear that a disaster is affecting Asia they hardly seem to care. After all, that is human nature. That is what we are up against. It is a good thing these matters are now published on a large scale, but I do not expect any great changes even from this publicity in the short run. Politically speaking, it would be impossible to bring about a kind of distribution of food at the moment if no more serious developments would occur. If such a decision would be possible, we would first of all have to limit the use of cereals as cattle fodder. Here an enormous saving could be made. This would automatically lead to a saving in the use of meat and poultry.

This brings me to a question about China. You were there last year. What were your impressions?

I was impressed by the fact that after all 700 to 750 million people are being fed without any indications of famine. Moreover, it has been possible for them to create a national food reserve. This occurs in the People's Republic of China is close collaboration between the government and the people. So it is impossible for us to say that there might be people who are dissatisfied about this. On the contrary. They all seem to work together. China is, of course, a country where different political norms are used than in practically any other country in the world. One might therefore wonder if the same could not be done in other countries. However, in my opinion this is doubtful, for I do not believe that people in other countries could easily be persuaded to share their poverty as is done in China, and which has at least led to a situation in which nobody has entirely been reduced to poverty. No
one in China is excluded any longer from the possibility of buying food. No one dies of starvation now. However, this has only been possible to achieve because poverty and prosperity are being fairly shared by the entire population.

_The way in which the Chinese population has been brainwashed into this unique but very necessary feeling of solidarity possibly may not be sympathetic to us living in the rich countries. But is not the final result the most important point for everyone?_  
Yes, it is. Naturally, we shall have to wait and see how long this development will last and whether it is possible to preserve this mentality.

_Madame Gandhi stressed in a conversation I had with her, that as a responsible leader of the government she would not impose birth control, but that she would ask the people to please have fewer babies. China may have used other methods, but can we say that there is more order and prosperity for the common man in the People's Republic of China than in India?_  
I do not have the impression that results in China have been achieved by using too much force, at least judging the situation from the outside. One sees very little dissatisfaction or opposition. At least, this is the situation at the moment, and the impression prevails that China's domestic security is greater than it ever was before. The individual in China now has a better and safer position in society, and no comparison can be made with the situation as it used to be. It seems to me that in view of the general mentality of the population, it would be extremely difficult to have similar results in India. I may be mistaken, but I believe that also in this respect too many Western influences have already penetrated into Indian culture.

_Professor Sladkovsky told me in Moscow that, for instance, only thirty percent of the agricultural land in India is effectively irrigated, whereas in China the same figure is seventy-seven percent. How can developing countries make more land suitable for agriculture without having funds available?_  
In China an effective use has been made of the enormous number of people who are available there and who have been used in constructing, for instance, irrigation works.

_This brings us back to the point of feelings of solidarity._  
Indeed. This feeling of mutual cooperation plays an important part here.
But in China a certain amount of force undoubtedly has been used. This force was accepted because people realized that what was done was in the interest of the community as a whole. In China it has been possible to retain very useful people who would otherwise perhaps have been unemployed. What struck me during my visit to the People's Republic was that no one was without work. At least, this was my impression.

*In India the number of unemployed is estimated to have reached sixty million.*

India has enormous masses of unemployed. That is one of their greatest problems. How could these people be usefully employed in the production process? Efforts have been made to employ them in certain agricultural development projects and to pay them with food supplies. But there simply is not enough food available in India to effectuate this on any large scale. This is not only a very serious problem for India, or Indonesia, or for other countries that have great population surpluses. In my opinion it is the key problem in Asia and in most other developing countries.

*Families in the rich countries spend an average of twenty percent of their income on food. In Indonesia it is sixty percent. There are still many countries where people have to spend eighty percent of their income on food.*

Indeed, a useful standard for ascertaining the standard of living is the percentage of income that is spent on food.

*What has really been the effect of the Green Revolution? Is it going to solve the problems?*

Technically speaking, the Green Revolution still has many possibilities to offer. At the moment there are special difficulties in this sector because together with the improvement in cereals there also have to be sufficient fertilizers, insecticides, and water available. Since 1973, these factors have been linked with the energy crisis. As you know, there is already a shortage of fertilizer all over the world. This is not only the result of the oil shortages. For we have had a period in which there was a surplus of fertilizer and in which production had to be restricted, particularly in the developed countries. At present, no immediate attempt is being made at increasing production again. In the meantime, the price of fertilizer has risen substantially so that it has become more and more difficult, particularly for poor peasants, to buy it. In most of the developing countries it is today even impossible to obtain any at all. In India there is a shortage of one million tons.
Naturally, this must have a serious bearing on food production in India. President Boumédiene recently pointed out at the conference of raw material-producing countries in New York in April, 1974, that ninety percent of the world fertilizer production rests in the hands of the rich countries.

This has to be changed. I do not expect a great deal from increasing the production of fertilizer in the rich countries. It is in the developing countries themselves that its production will have to be increased quickly. In this connection I am thinking in the first place of those developing countries that have the feedstock available themselves, which means the raw material for producing fertilizer.

The Arabian Gulf states, for example? If only one quarter of the natural gas which is now lost above ground in the oilfields of Saudi Arabia could be utilized, this nation by itself would be able to supply the whole world with the fertilizer it needs.

Investments should be made in fertilizer-producing industries in those countries where valuable raw materials are now literally going up in thin air. In this way the Arab countries would, in the long run, supply the markets in the developing countries with the fertilizer they so urgently need.

Time once described you as a cautiously analytical person, in any case not an alarmist. But coming back to the first part of our conversation: As far as the food situation is concerned, the world is in a state of war. Is it not time that you changed from being a cautious analyst to raising alarm, which might have a greater chance of success than has been the result of the many warnings you have issued so far?

I believe that I have sufficiently discussed the subject of what I think of the world food situation. At the same time one should be careful and avoid giving the impression that there is no hope at all. For I do believe that in the field of supplying the world with food, a tremendous amount may still be expected from our technology. We have hardly started to put the most sophisticated technology to work in the developing countries. I mean, apart from the so-called Green Revolution, which mainly concentrates on introducing better-quality seeds. Even in the developing countries there still is a great deal of wastage, for instance of water. This is the result of bad management, which could be improved upon considerably. All this will take time and requires a great deal of investment. In this respect, far more could be undertaken and achieved than is being done at the moment, for instance, in agricultural research. There should be much more cooperation in this
field, both regionally and internationally. In the FAO we are, in cooperation with the World Bank and the United Nations Development Program, working via bilateral programs on promoting research on a worldwide scale in which the emphasis lays, naturally, on the developing countries. We have collected as much as twenty-five million dollars for this purpose. With this money, research stations are financed, for instance, for maize research in Mexico or for rice in the Philippines. More money is now also available for wheat research.

Rice research for Indonesia?

No. No financing is going to that country in this connection at the moment. We are selecting the research institutes with a great deal of care and our projects are taking place wherever, in our opinion, they are most urgently needed at the moment. We have, for instance, founded a new institute in Hyderabad for studying the so-called drought zones. There will also be an institute somewhere in the Middle East for the ecological area which will cover the whole of the Mediterranean. An institute in Peru is engaged in the research of potatoes. I should like to stress that a shortage of food is not only a technical problem, but that it is also a social and economic problem. These questions are extremely complicated and they are mutually dependent. On the other hand, far more money will have to be invested in the earlier-mentioned research organized on a worldwide scale, because this is how we shall be able to discover how to use our technology in order to fight against the prevailing food shortage, at least on a technical level.

Eindnoten:

1 The United Nations was giving the figure of 800 million for the population of China when the secretary-general of the FAO spoke to the author.
49. Aurelio Peccei

Aurelio Peccei was born in Torino, Italy, in 1908. He received his doctorate in economics summa cum laude at the University of Torino. In 1930 he joined the Fiat Company and was sent by them to China prior to World War One. Since 1950, he has been a member of the management of Fiat. He has been head of the Latin American Division and Chairman of the board of Fiat Concord in Argentina. In 1974, Peccei resigned his functions with Fiat in order to devote most of his time to Club of Rome activities. From 1964 to 1967 he was president and chief executive of the Olivetti Company. On completing his mission of reorganization of this company he was retained as vice-chairman from 1967 to 1974, when he voluntarily resigned for the above-mentioned reason. Dr. Peccei is the founder of Adela, an international investment company created to promote development and private initiative in Latin America. He is chairman of the economic committee of the Atlantic Institute in Paris. Dr. Peccei was chairman of the board of Italconsult, one of Europe's most outstanding engineering and consulting firms, with headquarters in Rome. He resigned in 1974 as managing director of Italconsult, to have more time for the Club of Rome. Last but not least, Aurelio Peccei is of course the founder, in 1968, of the world-famous Club of Rome.

The Club of Rome is now entering its sixth year. What do you see as some of its principal achievements?

I think our main achievement was to spread the sense of something we perceived prior to the coming into being of the club: the awareness of the changed condition of man on his planet and the rapid deterioration of certain foundations of modern society. We were among the first to express these warnings coherently and to urge that the search for ways to escape from the situation as we saw it developing was of paramount importance. If one scrutinizes the last few years of man's existence and compares them with the whole of human history, one immediately notices that a great number of spectacular events have occurred in this very short span of time. Probably
none of us is really able as yet to understand the momentous importance of this wave of events, or to grasp how much, let alone why, the world situation has sharply worsened so suddenly. Many of us are now mesmerized by the extremely disturbing energy crisis which developed suddenly, descending on most people like a bolt from a blue sky. And a worried mankind has seen the ugly specter of famine reappear as a more serious threat than ever in many parts of the world. Its dimensions are so large and growing that a new word has been coined - megafamine. But how and why all this happened?

What the Club of Rome has done is to help prepare world public opinion to look at these phenomena as just different aspects of a single complex and changed global reality - which we have called the predicament of mankind. One of the Club of Rome's teachings - if we can use this word - is that this reality will defy our understanding unless we succeed in obtaining an overall view of the entire world problématique. We have all seen, for instance, the influence of the oil shortage on the stability and reliability of the monetary systems, and of these factors on the European Community's current performance and future prospects. This is only an example, but we may continue our reasoning and realize the kind of void that the lack of any basic European consolidation will create in a world which needs human society to coalesce into something new instead of the present irrational, hopeless fragmentations.

And there is the insulting discrepancy between the 1.4 billion people of the northern half of the globe and the 2.5 billion of the southern half.

This is truly intolerable not only morally, but now also politically. And it aggravates all other situations still further. The serious state of world affairs is beginning to be understood. In the United States, the National Academy of Sciences and the National Science Foundation have launched a huge research on the dynamics and impact of the gigantic population-food-energy complex of problems. Dr. Philip Handler, the president of the Academy of Sciences and the initiator of this project, seems to be more pessimistic in his estimates of what may happen in the world if no drastic steps are taken immediately than the so-called doom-sayers of the Limits to Growth project. Those who ridiculed that study when it was first published have become strangely silent nowadays. No one maintains any more that the Limits to Growth conclusions were merely ‘garbage’ poured out from wrongly instructed computers or bad dreams nurtured in the distorted minds of people who could only see the black side of life.

To sum up, two noteworthy developments characterize the past five or six years. In objective terms, one is this steady degradation of the world

Willem Oltmans, On Growth Two
situation. The other is that large strata of people - even ordinary men and women - have become aware and conscious that all of us are confronted with major, unprecedented problems. The general public seems to understand, furthermore, that we have got to fight back, and that this fight is not to be conducted in the interest of the rich or privileged segments of the world's population, or by one class or another, but that the mass of new world problems is a threat to one and all, and of such magnitude that it compels all people and nations to accept responsibility to do something about it. These are the reasons I feel that, although we are increasingly pressed by formidable problems, there is greater hope today that we will not be altogether swamped by them than five years ago, when most people were still lulling themselves into the belief that mankind was still forging ahead on the crest of the waves.

In April, 1968, when the Club of Rome came into being, you were a small group of concerned scientists and intellectuals from the Western countries. It seems to me that the club over the years has become truly universal.

Nearly so. What can be said is that presently we have members from all cultures and all continents. They come from practically all walks of life, from many different disciplines and varying ideologies. But we still are, and want to remain, a small group of a mere one hundred individuals. Although it is well-nigh impossible to have all shades of human conviction represented in such a small gathering, we do draw our inspiration from the most relevant trends of present-day thinking, awareness, and preoccupation over the human condition and various alternatives.

I noticed during the Club of Rome meetings that Indians, Latin Americans, and also the Poles were persistent in pressing for the acceptance of the fact that the globe consists of a rich northern half and a poor southern half.

That is true. Undeniable, as we have already noted, unacceptable gaps, divisions, and barriers exist between the rich and the poor, the powerful and the weak, the highly educated and the illiterate. Small, privileged minorities have all the opportunities while the majority of the population has little or no hope, no appealing future at all.

Still, the world in which they all have to live has now, for the first time, really become one. This explosive contradiction is the irony and tragedy of our time. Only by considering world society as a unitary, integrated system in which every part is basically interested in the well-being of all the others, can we hope to manage our individual and collective lot relatively well, and eventually even bridge the present fatal fractures which cripple our world.
Yet, these fractures are very real and multiply constantly. The traditional distinction of nations between the developed lands of East and West, and the less developed ones, is to a very great extent misleading. Yet, if we want to categorize, we may consider at least four, still heterogeneous, worlds. The First World is made up by the resource-rich industrialized countries, which means, essentially, the United States and the Soviet Union. Canada and Australia belong, although not fully, to this group. The Second World is made up of the industrialized nations that are poor in natural resources, like Europe and Japan. A wide range of standards and motivations can be detected within this group. Then there is the Third World of nonindustrialized or not yet industrialized countries, which, however, possess oil and other riches in raw materials, such as Venezuela and Kuwait, Ecuador and Nigeria. The Fourth World is that desperate group of lands, the poorest among the poor, which can count on neither industry nor resources. When we exclude for a moment China, they are inhabited by one-third of the world population and actually are the one-third that outbreeds all the others. Let me repeat that within the bodies of each of these groups we can, moreover, draw just as many dividing lines as there are natural, political, or cultural barriers within them.

In all our current projects, the world system is regionalized, namely, is considered as formed by some ten or twelve main regions or subsystems representing different levels of development, dynamics of evolution, and political or ideological orientations. The hard fact of our age, however, in spite of all these obvious divisions and heterogeneities, is that the interlinkages and interdependencies are so dominant, and growing, that all these regions are in reality bound into one single system.

Life on our planet constitutes an immense web of interactions. All problems are interconnected; none can be isolated from the mass and dealt with separately. All activities, all nations, regions, and regimes are interdependent in one single world. What we have got to acquire - and I believe over these past five years many people are beginning to acquire - is the perception that all peoples and nations are partners in this unique, small, and fragile world and that they are ultimately and inescapably bound together by a common destiny.

I know from my own observations that Marxist scholars such as Professor Jermen M. Gvishiani of the USSR and Professor Adam Schaff of Poland take a lively interest in Club of Rome activities. But will Eastern European representatives enter the inner circle of the club as members?

We consider ourselves a cross section of the most advanced portions of
mankind. We are eager to have more colleagues with a Marxist formation, particularly from socialist countries. So far, there are club members from only two of these countries. But, after all, it is not that important in our Club of Rome philosophy whether someone is a member or not. What counts is that our group as a whole is in tune with the world problématique and I think that this is precisely what socialist countries perceive more and more that we are. In December, 1973, I attended a high-level East-West conference in Prague. It was already clear to me, but I then had the confirmation, that also in Eastern Europe the leadership is increasingly aware and worried over the character, magnitude, and dynamics embodied by world problems. This happens, in my opinion, for two main reasons. One is that up till recently the socialist countries were satisfied that the problems of the West and, more generally, the ills of the world, were a pure consequence of capitalism. They thought that socialist nations would be largely immune to them. Now, they readily admit that, whatever the social system, there are problems we all have in common and others which have become so large and intractable that the joint efforts of all peoples and nations are prerequisite for meeting them with a modicum of success. This may be something new for many people in the West, but it has now become a fact that also in the West it is realized that these overarching problems stand out so formidably that they must be faced collectively, regardless of ideology. And a second reason for this new attitude by socialist countries lies in the fact that they now recognize the need to provide a constant horizontal connection among different groups of disciplines, to match the complex nature of contemporary problems and their organic interlinkages. It is in the tradition of scientific activity in socialist countries to base research in a large number of specialized institutions, separating the one from the other, each dealing in depth with a limited sector or problem. This strict verticalization is going to change or at least is going to be complemented by strong interdisciplinary connections and preparations. Great strides are thus being made in Eastern Europe toward the Club of Rome-type approach to problems of modern society and the future. This will greatly enhance and facilitate our dialogue with them.

Professor Gvishiani also informed me that the USSR is now likewise engaged in MIT-type studies of the future based on methods of systems analysis. No doubt, they have excellent mathematicians and systems analysts who are capable of applying existing methods or devising new ones to understand, correlate, interpret, and represent complex human systems. East-West communications and collaboration will be made easier by mutual

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exchanges in these matters. But when one moves from formulas and algorithms into plain language, some difficulties arise. Translations are complicated jobs. Take systems analysis, which is a general omnibus concept even with us. In the USSR, there is a different method of grouping knowledge and concepts in this field, putting them under the general umbrella of cybernetics. One of the objectives, and certainly not an easy one, of the newly founded International Institute for Applied Systems Analysis near Vienna, of which Dr. Gvishiani himself is the chairman, is to systematize and harmonize the glossary across the language barrier.

In Volume I of these conversations, I quoted you as indicating that the Club of Rome was then, in 1972, entering a second generation of projects.

As you well know, after the first study of Limits to Growth we immediately sponsored an entire series of new projects, now well under way. I will refer here to some of them. One of the major problems facing mankind in the remaining decades of this century - and most likely also during the next century - is the tremendous growth of the world population, which among other unfathomable consequences is bringing unprecedented pressure to bear on the limited resources at our disposal. Barring catastrophic calamities, it is practically certain that the world population will double its present size within the next thirty to thirty-five years. In our Problems of Population Doubling Project we want to tackle the simple but primary question of whether it will be possible to provide every citizen on the globe with minimal requirements to live a decent life. For the moment, in our model the question is being considered only as far as food is concerned. But other human needs are no less fundamental. They are the targets of further research.

Perhaps one of our most ambitious world-model studies is what has been tentatively called Strategy for Survival or Declining Options for Mankind, and, finally, Mankind at the Turning Point. These models will show that people are actually at a crossroads not only intellectually but also semantically when they venture to scan the future. This project is based on methodologies and regional or national models within a world context which are the basis of what can be developed to become a planning and options-assessment tool for long-range policy alternative; a tool which, by showing the possible outcome of different policy choices, can implicitly indicate ways and means for conflict prevention as well. This aid to decision makers will increase in importance with the narrowing of the freedom of choice imposed on all world protagonists by conditions of the global system and by a comproitive interplay among all nations and regional groups. In particular,
in situations of stress or danger, the current practice of subjective, intuitive, and often emotional evaluation of options, without any rational means of appraising their consequences, may become extremely dangerous.

The world system is represented in this project by interlinked regional models, namely North America, Western Europe, Eastern Europe, Japan, and other developed countries, South and Southeast Asia, China, Latin America, the Middle East, and Africa. Each model is structured hierarchically, with geophysical, ecological, technical, economic, institutional, sociopolitical, value-cultural and human-biological levels according to the state and culture of each region. Specific simulation models to study the phenomena of demography, of energy production and consumption, and of food production and land use have been developed. The central part of the project is the economic system.

Another particular feature of this project is its recognition of both the adaptiveness of human systems and the purposive aspects of human communities. This will, we hope, eliminate the stigma of being ‘mechanistic’ or ‘technocratic’ generally attributed to computer-based reasoning. Its techniques are in fact conceived as an aid to goal-seeking policymakers and give wide entry to the motivations, values, and norms which inspire our real actor: man. As said, these models should enable those of us who have the heavy responsibility of making policy analyses or decisions to evaluate alternative options at all levels of the decision-making process. A ‘game’ between man and computer will thus, we hope, produce more useful choices and in the long run fruitful experience in the conduct of human affairs in our ever more difficult world.

*What is the major conclusion that all these studies and research programs of the present problématique will lead to?*

I think that the outcome will lead to the general acceptance of two basic ideas as the imperatives of the present. One is the idea summarized at the Salzburg informal meeting of senior statesmen convened by the Club of Rome¹, namely, that nowadays, whether we are black or white or brown, from East or West, North or South, and whatever our ideologies might be, we must have something in common as a primary, vital priority - a sense of solidarity on a truly world scale. Without it, one day our world will crumble in ruins, dragging us all to disaster with it. So many of us still feel bound by national frontiers, by the allegiance to a certain flag, or by a certain culture. But we are now being forced to expand our views and make the quantum jump that is necessary to shift our allegiance to mankind as a whole and to consider the entire globe as our true fatherland, since no human group can

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¹ Willem Oltmans, *On Growth Two*
any longer expect to have an altogether different destiny from the other. Our individual futures will reflect that of the mass of all of mankind.

*This is what Indira Gandhi expressed in Stockholm in 1972 when she challenged mankind to look upon fellow human beings and all living things ‘with the eyes of a friend.’*

Indeed, despite the fact that too many of us still say one thing and do something else. But we will be compelled to change, if not by brotherly love, then by sheer self-interest, and to develop a keen solidarity with all humans and with all life generally if we intend to survive.

The second general idea our projects help to propagate is that fundamental changes are needed in the structure and governance of human society. Most people by now agree that the present economic order of the world is unjust and operating very badly. It no longer suits the situation in which mankind finds itself. It must be changed, and the sooner it changes the better, because in order to forge ahead, the world desperately needs an economic order which fulfills the job of assuring the well-being of nearly four thousand million people now and many more in the foreseeable future.

*How can one devise a new economic order and get it accepted by some 150 states?*

That is what President Houari Boumédiene of Algeria stressed in his opening address at the special session of the United Nations General Assembly last April in New York. He raised the question of what he called the scandal of the present economic order. I totally agree, and hope that we will be able to contribute positively to the search for this new economic order. But at the same time - although I must recognize that this is never explicitly admitted - the political order of the world must also be reformed. The concept of the national sovereign state does not correspond to modern realities. To base a new international economic order on the unstable, irrational, obsolete structure of present-day world society, which upholds as a sacrosanct principle the concept of national sovereignty, is like building a castle on sand. I can fully understand that paladins of the idea of national sovereignty when they stand up in defense of small nations threatened with being gobbled up by the big empires. But their reasoning against the rule that might is right in the international arena is not a good enough justification of the idea of the national state in itself. The contrary is true. Particularly when a national state is itself - as often occurs - a persecutor of minorities. If we are not able to move quickly away from a situation in which world society is fragmented into these 150 some state entities of entirely different sizes and
power, each one claiming quasidivine rights and ready to impose on the others the rights to lie, cheat, and bribe whenever its parochial ‘supreme national interests’ are questioned, then it will be not only difficult, but wholly impossible, to construct a new economic order for the entire globe. Therefore, I feel that the proposals of President Boumédiene, as well as those of President Echeverria of Mexico for a new charter of rights and duties of states, have to be most seriously studied and accepted as necessary, healthy acts of innovation on the short term, in the spirit that first things come first; but that a deep reform of the very basis of society is needed if mankind is to get out of its present predicament. In a way, this second idea also may be absorbed within the new concept of worldwide solidarity. If you are aboard a sinking ocean-liner, there must be solidarity between crew and passengers, otherwise a riot would develop and all would perish. The new rules or the new order would be those on the lifeboats, and no longer those of the liner. Our forefathers were still living by a solidarity tied to the boundaries of France or Sweden, for example. Today we will have to go beyond these limits. Our fatherland is now the world.

In 1950, the world counted seventy-five cities of over one million inhabitants. In the year 2000, there will be 275 such metropolises. Take Bandung, Indonesia: It will increase within twenty-five years from 1.2 to 4.2 million.

And Calcutta might well swell to thirty million inhabitants by the year 2000. If not strictly regulated, Mexico City and São Paulo may well go up to twenty million. The fate of these four cities and that of other megalopolises in which our children will be obliged to live or from which they will try to escape will influence the fate of entire mankind. The seats of power are located in these centers. But this does not change the picture. We can only imagine with horror what will be the psyche or the reactions of the citizens of those monstrous conglomerations. There is, however, some hope. Already, while in all continents, people are discussing essential problems of population, hunger, energy, environment, and so forth, it is generally the city dwellers who first realize that whatever differences they may have with their neighbors, they must find a way of living together. Crammed into small spaces, they grasp that coexistence has become synonymous with survival. The hope is therefore that, similarly, the dire necessity of some sort of global response, organization, and programming is dawning on them.

I am a qualified optimist in this sense. The creative revolutionary potential of the very idea that a new political and economic order in a not too distant future is not utterly utopian is as yet difficult to perceive. Many things may
be set into motion; the constituent period of a world society may be approaching. The myriad meetings and conferences on world issues we witness today are probably nothing less than the forerunners of what one day will be a world constituent assembly.

Willy-nilly, mankind is being pushed by its knowledge and technology, as well as its problems and difficulties, toward a new kind of society which has got to embrace the entire planet. It therefore behooves our generation to devise the institutions, the instrumentalities, the decision-making processes, and the rules of life which can bring this world society together and transform it into a just and orderly place.

This gestation of a bigger and more viable unit may well be compared with what happened in Germany some 150 years ago at the time of the Zollverein, when a customs union proved to be the only way toward political unification. It may be likened also to the movements that took place in Italy prior to unification. On our peninsula there were many different states - kingdoms, grand duchies, plus regions under alien rule, including the Pope's Vatican. Each had its own potentate. Nevertheless, this untenable fragmentation was done away with and a new political unit, Italy, was formed. A similar movement can be traced back to many other states and is now in the offing in certain vast regions. Is it a pipedream to imagine that in a not too distant future this is bound to happen for the whole of the world?

There is no doubt, in my opinion, that human society is now going through the birth pangs of something that will in many ways supereede the national state. I do not advocate a world government. But there is the need for an entire gamut of new institutions, most of them having a base wider than most of today's nations or coalitions. It would be totally illusory and deceptive to assume that in creating these new organizations we would simply have to amplify the present ill-functioning national organizations. Theoretical efforts and pragmatic insights are urgently required to envisage new models of sociopolitical institutions which could bring and hold society together and make it operate satisfactorily in the interest of all human groups at all necessary levels, including the global level.

Still, what is very much on my mind is the crucial question of how can we - or the Club of Rome with its vital recommendations - put these findings and suggestions into practical action?

We should consider three steps. The first is to grasp the reality of each situation and understand it before acting. No one can act intelligently without knowing approximately the nature and possible evolution of the situations and problems to be dealt with. The second step is, on the basis of
this newly acquired knowledge, to define what can be done, what are the feasible policies recommendable, and what are their possible outcomes. No less than the first one, this phase will be a continuous affair, because adjustments and corrections are likely to be introduced from time to time into any policy course. And the third step is to move from policy decisions to policy implementations. These three functions continuously overlap and interact, of course. They must also be attuned to cultural and political realities. For instance, it is impossible to devise policies and strategies without considering the qualities and defects of the people for whom they are intended, or to neglect their limitations, their idiosyncrasies, their wishes, or their motivations. Fundamentally, therefore, these are our challenges: first, understand; second, resolve what to do on the basis of our newly acquired knowledge. And third, act accordingly.

The Club of Rome's purpose is to face these three steps in the global long-term context. Of course, being just private citizens from many countries, we have no mandate ourselves to make or suggest decisions. We can act as the conscience of policymakers, or as their advisers, or as catalysts for a more humane and rational course to be followed. In these roles, exercised directly or through the mass media, we are in contact with all kinds of decision makers or policy influencers from all strata of world society, with government leaders, with international organizations, with unions - but, of course, it is not up to us to set action in motion in one way or the other.

The attitude and response of the public at large is, however, of capital importance. I am convinced that there is a large and growing number of people available ready to accept - even at the cost of personal sacrifice - vigorous changes in the world's orientation and organization. If the mass of the people fully understand why these changes have become necessary, it is in this direction that I think our major efforts should be directed.

Eindnoten:

1 A Club of Rome Conference held in Salzburg, Austria, attended by the Presidents of Mexico and Senegal; the Prime Ministers of Canada, Sweden, and the Netherlands; the Chancellor of Austria; and numerous other high officials from other countries.