World Futures Studies Federation



Futures Studies in the European Ex- Socialist Countries

Edited by Erzsébet Nováky, Viorica Ramba Varga, Mária Kalas Kőszegi



Futures Studies Centre Budapest University of Economic Sciences and Public Administration



Budapest, 2001

Futures Studies in the European Ex-Socialist Countries

These are:

Bulgaria, the Czech Republic, Estonia, the German Democratic Republic, Hungary, Poland, Romania, Slovakia, the USSR/Russia and Yugoslavia

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INTRODUCTION

ERZSÉBET NOVÁKY, VIORICA RAMBA VARGA, MÁRIA KALAS KŐSZEGI

Being on the eve of the 21st century we came to the conclusion it is time to summarize the information on futures studies in our East and Central European ex socialist countries between 1960 and 2000 and make them known far and wide. From a historical perspective we intended to give a comprehensive and comparative picture about these activities in the individual countries.

This idea was inspired and guided by an important consideration. The researchers who have been active since the sixties have accumulated enormous experience, which is not yet compiled for internationally consumption for the future. It is our common interest today, that this accumulated knowledge not be allowed to disappear. Therefore, our fundamental goal was: to provide a stage for the members of the previous generation to present their activities and results to convey their store of learning to the next and the forthcoming generations and to help them amid their different but not less difficult circumstances.

Viorica Ramba Varga, from Bucharest, as her idea, worked out a Questionnaire for having systematized information on futures studies from this region. Her conception met with the future-oriented thinking and commitment of the two Hungarian futurists - Erzsébet Nováky and Mária Kalas Kőszegi - we three (members of the World Futures Studies Federation) immediately set up an Editorial Board in Budapest. We finalized the Questionnaire and worked out the concept and the structure of a book.

To reach our aims we turned to the well-known and experienced futurists and scientific committees/societies of the countries in this region to participate in this historical work. Appreciating their known valuable futures studies activities we had every hope to be partners in this venture. Our intention was to have information from all of the European ex socialist countries. At the end we succeeded in collecting country studies from Bulgaria, the Czech Republic, Estonia, the German Democratic Republic, Hungary, Poland, Romania, Slovakia, the USSR/Russia and Yugoslavia.

Here we have to express our thanks for the valuable contributions of everyone ready to send us their materials in time. Special thanks for their enthusiastic participation.

It is a great honour for us that *Eleonora Masini*, founding member and president of the World Futures Studies Federation, identified immediately with the importance of our concept. She has been familiar with and interested in the futures studies activities all over the world including our countries for a long time so her great attention and empathy concerning this venture was just natural.

We hope to find among the readers of this book not only those who have been active in the field of futures studies in the past but everyone who is interested in our futures, who feels responsibility for it and who forms our common future, and is willing to deal with them on a scientific level. We also hope this group is a growing one, including people of different ages, mainly the youth.

The book consists of two main parts: i.e. country studies and the synthesis of the answers given to the Questionnaires. They covered the period of 1960-2000, divided into two parts, 1960-1990 and 1990-2000. The borderline was the fall of the Soviet Union and the socialist system, when the transition period started. The country studies are published in their original form under the name of the author as independent chapters. The Editorial Board made *only some slight editorial corrections*. The answers to the Questionnaire gave a good possibility to have a comprehensive and comparative picture about the futures studies activities and scientific results of the futurists in the given countries.

In carrying out this venture successfully *Mária Kalas Kőszegi* and *Erzsébet Nováky* shouldered the work of searching for the responsible authors from the countries, keeping the

contact with the foreign partners, and the editorial work of the book. The majority of the staff of the Futures Studies Centre at the Budapest University of Economic Sciences and Public Administration led by *Erzsébet Nováky* also participated in the work. From them, however, we have to raise the name of *Éva Hideg* who provided great help in finalizing the Questionnaire. The technical infrastructure was aided by this Centre.

The encouragement of UNESCO and the WFSF is also highly appreciated.

Finally, we must mention something else. It gave us a special happiness to be able to work together with widely known famous colleagues in the field of futures studies from different countries. That possibility helped us to bring out such a book, made by everyone, authors and editors, voluntarily, without any financial or other material compensation. This fact made us become real partners in this scientific field.

And now, as a conclusion one can see how people can work together, even internationally neglecting any material interest in it. ... Can this be the unselfish future already?

PREFACE

FUTURES STUDIES AND THE WFSF IN CENTRAL AND EASTERN EUROPE MAINLY IN THE PERIOD BETWEEN 1970 AND 1990

Eleonora Barbieri Masini

What was called the Second World Conference in Future Research (at that time this was the name of the discipline) took place in Bucharest in September 1972. It was the first time that scholars and other people interested in futures studies from Western and Central and Eastern Europe had met to discuss and exchange views. I was present at the conference organised by Prof. *Hidetoshi Kato* in Kyoto in 1970 but not at the very first one in Oslo in 1968 when *Johan Galtung* and *Robert Jungk* had invited people such as *John McHale* from the United States, *Hidetoshi Kato* from Japan, *Igor Bestuzhev-Lada* from the USSR and others from Poland. In this Oslo meeting, Mankind 2000, *Galtung* and *Jungk* started the discussion of a possible world federation.

The Soviet Union was present at all WFSF meetings with the participation of *Bestuzhev-Lada*, who was able to give the information on the studies undertaken. *Lada*'s personal work was on methods and the use of social indicators in futures studies as well as on terminology on which I also worked with him. He certainly kept futures studies alive in the USSR and especially in the Russian Republic and published extensively. I would also like to recall *Gennady Dobrov*, a member of the WFSF till his death, who was for a long time at IIASA in Austria, and in Kiev organized a school for futures studies which I personally visited.

Bucharest was a wonderful experience with people from the Romanian group such as *Mircea Malitza, Mihai Botez, Pavel Apostol, Viorica Varga* and many others actively present. We must think of the historical moment and what that meant. The group in Romania later took the name International Center of Methodology for Future and Development Studies. The Romanian school was mainly made up of mathematicians, because in that period Romania had an important school in this discipline and was interested in models. In my understanding, the most important present activity is that of Prof. *Mircea Malitza*, the founder of the University of the Black Sea. With his knowledge as a mathematician, but also as a great humanist, in a different historical moment and a different manner, he is carrying on the work initiated thirty years ago. I believe that *Ana Maria Sandi*, also a mathematician, is still working in the area of development and future thinking, as well as the very open-minded social scientist *Viorica Ramba Varga*, who has been present since the very beginning.

In 1972 Poland was strongly represented by Poland 2000, which was the group within the Polish Academy of Warsaw. It was specially interested in cultural issues, whether in terms of cultural artefacts, as the theatre, or in anthropologically understood culture in Europe. People from the excellent school of sociology of Poland were also part of the group, including *Jan Strelecki*, a hero of the resistance against the German invasion and an excellent and famous sociologist, who died in mysterious circumstances in 1981, *Andrzej Sicinski*, briefly Minister of Culture during the first government after the change, *Jan Danecki* and *Danuta Markowska*. This group was extremely active in the 80s during the difficult period of change.

In my view, two aspects of the 1972 Conference were of particular importance: the decision to found a World Federation of Futures Studies (the WFSF came into being in 1973) and the real interest in futures studies expressed by Eastern European countries despite the limitations of the historical period. I would like to stress the important role played by futures studies and the WFSF in a very difficult time for these countries, offering what *Milos Zeman* of Czechoslovakia later referred to as a "window on the outside world". This is no small role, if viewed in a historical perspective. Despite its many problems, Czechoslovakia managed to keep the interest in futures studies alive, first with *Radovan Richta*, the author of the famous

book "Civilization on the Crossroads" (now impossible to find) and later thanks to the commitment of many others, including *Milos Zeman*, at present a high-ranking political leader.

The third WFSF World Conference was held in Rome (1973). Again there were many scholars from Eastern Europe with Hungary showing the extent to which interest in futures studies had developed under the leadership of Prof. *Géza Kovács* and with the presence within the Futures Research Committee at the Hungarian Academy of Sciences of people of the calibre of *Maria Kalas Kőszegi and Erzsébet Gidai*. The group in Hungary was mainly oriented towards economic development and has therefore been able to play an important role in recent decades and indeed through the entire historical period. Much was also due to the charismatic figure of Prof. *József Bognár*, a great economist and member of the Club of Rome.

The very important school of Hungary was present at the Rome conference but became more visible and active in the following years. Therefore the European Regional Experts Meeting on "Technology of Future and its Social Implication" was organised in Budapest in 1987 and three years later the XI World Conference of the WFSF under the title "Linking Present Decisions to Long-Range Visions" was also successfully organised there at the time of the beginning of the transition period in the European socialist countries.

Yugoslavia did not have a group as such, but many people took an interest and worked in futures studies. *Mihailo Markovich* was one; for a longer time and at great personal price, *Radmila Nakarada* was another. The School of Philosophy and Sociology was mostly involved and supported *Johan Galtung*'s interesting idea to create an International University Center (IUC) in Dubrovnik in 1975. Many cutting edge disciplines were taught there since its foundation in 1975, with the initial support of the United Nations University and the contribution in terms of faculty and students of over one hundred universities from all over the world. Both faculty and students came from Western and Eastern European countries; among the courses, there was also a Futures Studies course, the first didactic activity of the WFSF aimed at building the next generation of futures thinkers. The University was destroyed in 1991 during the war. Although it has been rebuilt, it no longer has a Futures Studies course as such in Dubrovnik, and the Futures Studies Department of the Budapest University of Economic Sciences - headed by *Erzsébet Nováky* - has continued the tradition since 1999.

Courses such as Mediterranean Studies, Women Studies and *Jurgen Habermas* philosophy and sociology were held in Dubrovnik interacting with the other courses including futures studies courses. The IUC was an example of international academic freedom rarely found anywhere in the world. In Dubrovnik also the Fourth World Conference in Futures Studies (in 1975) was held with many participants from different countries with limited but sufficient support from UNESCO. The amount of its support would today be considered very low but the conference took place because people wanted to be there and paid their own expenses with dedication and sacrifice.

To the best of my knowledge and information in all European ex socialist countries despite the periods survived, sometimes amid extremely difficult circumstances futures studies and research are again revived in different forms, places and institutions thanks to those new generations who had a possibility to work together with the founders of futures studies in different countries and who are still lucky to pass on their knowledge and experience to the youngest generation. To our greatest satisfaction these young people are deeply interested in their futures and more than one of them have become experts of internationally renown in this field.

I would like to conclude for my Western colleagues by saying that, from my own experience as a member of those engaged in the efforts of these years with *Johan Galtung*,

Mahdi Elmandjra and Robert Jungk, I know that, despite the difficult times, people continued to hold meetings and carry on research with great courage and in great personal danger. They did so because they believed in the advent of different and alternative futures to the ones they were experiencing. Has this been so and what responsibility do we, Western futures thinkers, have from now on?

PART ONE: COUNTRY STUDIES

Bulgaria The Czech Republic

Estonia

The German Democratic Republic

Hungary

Poland

Romania

Slovakia

The USSR/Russia

Yugoslavia

FUTURES STUDIES IN BULGARIA

Alexander Tomov

1. PAST AND PRESENT OF FUTURES STUDIES IN BULGARIA

Till 1990 there was ideologization of science, dominated by the governing Bulgarian Communistic Party, so there were no direct participants in the future research processes. In 1986 Alexander Tomov received an invitation and took part in a World Futures Studies Federation's congress for the first time. Since 1987 young Bulgarian scholars began to attend the Federation's seminars.

In 1990 for the first time, there was a meeting of the Bulgarian futurists. The idea for "21st Century" Foundation - Centre for Strategic Studies was born then together with the Bulgarian Future Society, which is in fact the foundation's board of trustees and a group of younger scholars from the Sofia University and the Bulgarian Academy of Sciences. The 21st Century Foundation still continues making future research programmes. It is a collective member of the WFSF.

During those years, for the first time, futuristic researches were made in the field of the national security. In 1992 the Foundation developed a strategy for the development of the national security, in accord with the events on the Balkans, Yugoslavia's disintegration and the occurrence of new countries, based on the concept for different degree of cooperation between the Balkan states in the area of defence.

The membership in NATO was looked as strategic, but stakes were laid on initial membership in other blocks and organizations for partnership, including the possibility for regional partnerships in various fields including the field of security as well, following the example of the Scandinavian countries. It was then that the development in line of the Pugwash movement began. Till 1996, the 21st Century Foundation developed economy analyses, which viewed the development of Bulgarian economy in the context of the restructuring of the property.

In Bulgaria there was not any interest in the futures studies under those years. Although the 21st Century Foundation and BFS developed various concepts in the social, the economic and the political field. A great number of these concepts were published in Bulgarian and international science magazines. A great part of the concepts are synthesized in Alexander Tomov's book ("The Fourth Civilization").

The biggest change, which is observed in the Bulgarian society during the period of transition to democracy, is that some persons who take part in the country government are connected with the futurists in Bulgaria. Members of the Foundation's Board of Trustees used to be prime ministers, vice prime ministers, ministers, bank directors and experts.

Unfortunately, this process stopped in 1996, when the Bulgarian Socialistic Party, the BCP's successor, took the power. It gradually removed people, connected to the futures studies, from the power. The process did not stop then; it continued to the present days throughout the government of the UDF. It is due to the governing's lack of interest in these research programmes and the lack of a whole strategy and a concept for Bulgaria's development in future. The reform in Bulgaria is parcelled and its directions are dominated by various groups' interest, connected to the governing political party.

In spite of it, the 21st Century Foundation research programmes in the fields of geopolitics macro-economy and the restructuring of the property produced an impact on the transition in the country, when some of the members of the Foundation and some person from the circle near - it took part in the government. In an inner plan the Foundation develops research programmes in the fields of the social stratification, the development of poverty and

corruption, which mark the major problems, which the country will face in the process of transition.

Nowadays the position of the future researches in Bulgaria can be restored due to the opportunity for the executing a new policy in the country, based on the consent between various political forces. A reform in the BFS and involvement of new young scholars in it is on the way. The main problem of the transition is the brain leaking from Bulgaria, which hits hard the research programmes. The moving of the centre of the research programmes of worldwide significance from Europe to Australia brings a serious problem, too.

Due to the total decline in the education there are no bigger opportunities for reviving the future research programmes in the country.

At the moment the situation in Bulgaria is not changed in a positive direction. The opportunities for development, for finding a job and for science research programmes are limited. The country does not finance such research programmes, there are not any science magazines. The development of science is limited and it is carried out only in the universities, but the young scholars working there are trying to work other jobs out of them, because of the law payment. The youth as a whole is trying to emigrate. A smaller part led by the idea of educating themselves in west universities, and the bigger - by the idea of finding work in the West-European countries. In general, they are not concerned about their future. The reasons, on one hand, are linked to the economic crisis in the country, which went for too long compared to the society's expectations. The society is not hoping anymore that it will come to an end and therefore a huge part of the Bulgarians are determined to do without a great number of things in order to afford themselves to send their children abroad with the hope of their realization there. The success in the minds of Bulgarians is closely linked to the emigrating.

The futures studies are not taught as a single scientific field or as a single subject at university level. They are incorporated into other subjects, taught by members of 21st Century Foundation.

According to the Bulgarian futurists, futures studies should not be taught separately, but incorporated into other subjects. They claim that futures studies are applicable in any science fields, though they may find limited application in places.

In contrast to the futures studies worldwide, which are still abstract, the futures studies in Bulgaria are trying to regard practical issues. Therefore, the developed research programmes induced the country government and its policy in geopolitical plan. This refers to the prognoses in the economic field, too.

An interesting fact for the WFSF can be the cycle theory, which was developed in Bulgarian conditions as a methodology. The creation of methodology for evaluation the processes specialized a great number of Bulgarian futurists in the field of creating prognoses and analyses.

The Foundation intends to continue its research programmes and to develop a methodology for a niche research of the labour market, the need for experts in different fields and regions, not only in the country but also in Europe. The observations show, that there are specialists only in certain fields pulled out of the country, namely: computer experts, physicists and dentists.

2. Future of the futures research programmes in Bulgaria

There should be created a triune formula, which will involve the 21st Century Foundation, BFS, and scholars from the universities in order to continue the work of the futures research programmes. They should use the methodology of the research programmes, by considering each decision suggestion from probability theory's point of view, evaluating it and depending on its evaluation, it can be either put into practice or not.

The comparative analysis of Bulgaria and some countries, members of the European Union, can be taken for one of the basic elements. The awareness of all the problems, linked to the acceptance of the correspondent country as a full right member of the European Union can formulate a full idea about the directions which needs reformations. On this basis a number of research programmes can be developed for the positive and the negative aspects of the transition from associate to full membership. Practically this means to take a look at Bulgaria's problems and to determine the potential risks for the country, on the basis of the European economy. Such a strategic analysis can be of use both to Bulgaria and the European Union itself and to the global economy as well.

In Bulgaria, the field of politics has the greatest opportunity to develop the futures studies research programmes.

Being a centre for strategic studies, the 21st Century Foundation can develop a methodology, which can give us the parameters of the change. Bulgaria needs clear studies, not only on the intentions for democracy development but also on the country's stabilization. At the moment, due to the events on the Balkans, Bulgaria is regarded an island of stability. This role, however, can advance in different directions, depending on the perspectives, which are offered from global point of view.

In spite of the temptations, in the 10-year period of its democratic development, Bulgaria did not become a member of any Balkan axes. This was an auspicious policy, because in the epoch of globalization the good-neighbour relationships mean fewer borders, fewer armies and more exchange of goods, capitals and services. More free movement of people.

The Bulgarian society faces a number of geopolitical dangers. The first is to slow down the process of European integration, in spite of the given hopes from the Niece's decisions. This slowing down would not be a consequence from processes, going in Bulgaria, but from processes abroad. Processes on the Balkans as a whole. This way regardless of its policy Bulgaria can be left apart from the common European processes. Therefore the only solution is that, Bulgaria should stand for the individual approach, because, if we adopt or search for another approach, it will mean to accept the braking of the approach concept, adopted in Helsinki. But this approach is uniform, an individual speed depending on the criteria fulfilment. And if in Europe there are politicians who step back from these criteria, we must remind them that this is not consecutive and of principle from the point of view of the philosophy and the European unity. The second danger comes from the desire of some politicians to replace the European integration and the European Union with the Stability Treaty. This politically is unacceptable for Bulgaria and for the European Union itself. Bulgaria must understand that this is a geo-political and geo-strategic matter of principal. The regional integration is not an alternative but a must and this should be clearly understood by both the Bulgarian and the West-European politicians. Visas are a bridge that will not allow it happen. The abolition of visas is the bridge, along which this could not happen. For, if such a thing happens, even for 4-5 years, this can lead to catastrophic consequences for the competitiveness of the Bulgarian goods, the Bulgarian factories, funds and the Bulgarians themselves. Each delay means a risk for Bulgaria's stability and security. Thirdly, it hardly needs reminding that there is a thesis for the division of the Balkans, they are divided in Eastern and Western and Europe does not want the Eastern part to become a part of Europe. A thesis, which says - yes, but only for the catholic Balkans now, the orthodox later. The Bulgarian people and the Bulgarian government must not accept such a thesis - a concept for the division of the Balkans and political priorities, akin to those from Helsinki. Although this thesis looks impossible it has its place in the European space and can always become a part of the European Union's policy.

The forth danger is connected to the possible change and substitution of the criteria from Helsinki. Practically this means that new political expediencies will be introduced or that

Europe will shift from the concept of uniform criteria to the concept of political expediency in the determining of geopolitical priorities. This, too, cannot be acceptable for Bulgaria and no price is that high that it can be accepted and paid. The Bulgarian people do not accept such a philosophy. And this must be announced and heard today in the beginning of the new millennium.

Yes, we are poor. Yes, we did make lots of mistakes, we do have lots of problems but we deserve our part. With the consecutive work of many governments, with the national consent on the European integration, with the point that that there is hardly any Bulgarian, a party or a clique, which are against it.

And this distinguishes us from many other European countries.

The fifth danger is association to the new situation on the Balkans. When we are in search of our identity, we should not do it at the expense of Yugoslavia, Romania, Macedonia or anyone else. Moreover the stability treaty is not just a concept for regional partnership, but it is a strategic programme for the development of the Balkan region, based on the mutual cooperation and the defence of the Balkan Countries' interests. But while respecting our neighbours we must stand for our own interests at the same time. The new situation on the Balkans craves not only for new approaches, but also new decisions and new political activity.

And finally, there is an existing danger that the following of such a line of interior policy, explained and approved by the demands of the West-European countries and, which would not lead to the expected results, can create anti European attitude in the country.

The philosophy of the Bulgarian policy must not be: "to get accepted in order to get better", but "to get better all by ourselves in order to get accepted".

This is the right way.

Yes, Bulgaria has to solve lots of problems but it should not whip itself for it on the contrary. Bulgaria must aim to become a part of the European political space. To become an European border, for a long time, for a real long time. In the Balkan conditions, or in much worse conditions.

For the only thing that the country lost in the last decade of the previous century is the security - the national security of the country. Not because it is endangered, of course, but because it is still not strategically associated to the main structure for defence in Europe-NATO. The question of our national security is connected to the political stability of the country in the inner plan. The increasing level of unemployment leads to strengthening of the insecurity, to strengthening of the radicalization and can destroy the balance in the country. The west-Europe, however, is not interested to become a peacemaker in the Balkans. To the contrary the economic stability, in fact, means foreign-political stability.

That is why Bulgaria is going to face not a debate on its national security, but a debate on the agreement of the national messages. For when the inner contradictions are fewer the price of the country is growing higher and its national security is rising. When the country is divided into pro and contra cliques its price is falling down and it grows weaker. This includes the military and the inner security areas, too.

If Bulgaria formulates and announces clear messages, it will not need any membership in one or another military and political block. For the country's inner stability will become the basis of her foreign-political security.

This doesn't not mean that the country should not take a clear position about NATO and the other regional and European organizations for security and partnership. Bulgaria however, demonstrates separation and lack of consent more than 10 years.

In its relations to Russia Bulgaria is interested in practical confirmation of permanent political dialogue, in settling of a long-term and mutual contract basis for the development of

the mutual trade connections, providing vast access of the Bulgarian products to the Russian markets.

We must not create new borders but abolish the old ones.

We are convinced that the executing of such policy is realistic and it corresponds to the interests of our people.

2.1. In the economic sphere

The Bulgarian government must develop a detailed programme both in national and branch level. The development of such a programme cannot be done without the involvement of leading futurist experts. Bulgaria must be involved in the executing of all the all European policies and to harmonize its legislation with the EU's legislation in order to give its share to the increasing of the stability of the South-Eastern Europe.

The 21st Century Foundation is perfectly aware of the fact that the country's economy is not at its highest level, which means that the country does not have clear economic priorities and a clear national economy policy linked to them. The population of Bulgaria has a low income. Our place in Europe's statistic data by this index is one but the last. Bulgarian products lack current and strategic competitive power. Practically there is no niche strategy and no niches, in which it is known that Bulgaria is a competitive in the European markets.

2.2. In the health care sphere

In the health care sphere projects can be developed for the development of the biotechnologies, the prevention and the healing with natural resources. The development of the rural and health tourism, based on the Bulgaria's richness of mineral basins and spas which can contribute to its multidirectional participation in the European and global system for protecting human health. The prevention in the transition period and economic crisis is quite a challenge to the Bulgarian society. This impels the development of different strategies for the development of both the health care and the opportunities, which Bulgaria's geography position and mineral resources provide. On the other hand the health care system in Bulgaria needs reformation, the market approach itself cannot guarantee people's health. The country must find a way to continue its participation in the people health care process. Various concepts can be developed in the direction for development of the health care system, the primary health care and the hospitalization.

2.3. In the educational sphere

Concepts for reforms in the structure of the secondary education can be developed, due to the computerization of the educational methods and the introduction of new educational techniques.

The access to the mass communication devices in the face of the Internet will give the chance to the Bulgarian society not to become left behind the global tendencies in the educational sphere.

In the university education sphere a new role of the teacher is being outlined. Teachers must reveal new parts of the science, to offer methodology and, of course, to discover and support the students' talents.

In this aspect the practicing of various knowledge of the futures studies can assist the processes of integration of the Bulgarian education to the global levels.

2.4. In the social sphere

Keeping in mind the fact that the level of unemployment in Bulgaria is very high there is a need of development and putting into practice of various social practices for providing work load, guaranteeing of part time payment, providing an alternative approaches for qualification and pre-qualification. Until now there were no research programmes in the dimension of the social segregation, the possibilities for its deepening or overcoming as well as the social stage

for the forming of middle class. A new social policy is needed which will guarantee the social-political stability of the different layers of the population.

There is still no strategy for turning the Bulgarians in actual owners of property with which they can operate under the form of shares or share-parts. The long-term segregation of the society of extremely rich and wretc.hed poor will practically endanger the stability policy in the region and will endanger the global economy interests.

2.5. In the technology sphere

It is widely known that countries and peoples, which do not possess communication technologies and cannot freely use them practically will be left out of the current of the global economic and political development and will become the backyard not only of Europe but also of the world. We cannot depend only on the good will of the well-developed countries and to expect to be given technologies by them, we must alone turn into an integral part of the global information society. The communication is the culture of tomorrow. In order to succeed we are in need not only of equal participation in the global political and economical processes but also of real presence in the global policy. Opportunities for this can always be found, let the country not swing from the one extremity to the other in its foreign-political orientation, but to execute a consecutive and balanced foreign policy.

2.6. In the environment

The 21st Century Foundation developed projects in this sphere, which were financed in line of the future research programmes and European funds. Bulgaria has many opportunities for development of different niche strategies for development of the ecological and environment protection tourism.

The motifs for such development are linked to the global danger of destroying the environmental balance on one hand and the chance to keep different oases in the frames of the global world. They can become the places where various new technologies will be developed.

In the end, it can be stated that the Bulgarian futurists will get much fully integrated in the global futures studies community. The economic and political crisis in the country, the lack of financing of the science puts obstacles in the way of this integration. The opportunity for political stabilization, which outlined itself under the last years gives a chance for such a development. Otherwise organizations such as 21st Century Foundation and BFS can become the only institutions which are occupied in such activities. The problems with the financing of such projects compels our organizations to devise ways for a great number of foreign investment. A thing that is extremely hard to do and moreover hinders and even limits their work in determine directions. We hope that the WFSF will assist the organizations, which deal with such research programs in the East-European countries. Due the fact that these countries are under transition from centralized to democratic society and they lack well-developed civil societies, these organizations are still seeking the directions of their own researches in the sphere of the inner country problems. This does not allow a full positioning of these researches in the WFSF's activities.

FUTURES STUDIES IN THE CZECH REPUBLIC

Frantisek Petrasek

1. Some features of local futures studies ideology

A paradigmatic base from which the local futures studies can derive their ideology, has some specific cultural features created in the history of the nation. Such features can be labelled by the term "futurosophy" (like reasoning the logic used for thinking about the future or, in another words, like reasoning the "futurology") (1). The Czech futurosophy manifests via discrete ideas, generated in longer cultural history of the nation.

The first feature can be represented by teaching of Jan Amos Komenskì (Latin name Comenius, 1592-1670, the last bishop of the local protestant Christian church, expelled by Hapsburgs after defeating Czechs and their state, later acting in the northern and middle Europe like teacher and theoretician of pedagogy). His teaching involves the thesis, that all ideas, which we create by learning, represent good information for the human being in case, that they are generated simultaneously with doing things. Doing things must be oriented by the Christian morality, otherwise ideas generated by that "learning by doing things" can motivate human being to act against himself. His message represents challenges for various political reformers as far as they have to consider the future of the society strongly dependent not only on actual practice of doing things, but also on the "world of values", which people implement in their contemporary decisions. Futures studies, according to Comenius thinking, can bring adequate information for human survival in the case, that they lead not only to the creation of new structure of backlogs of knowledge suitable for exploitation in contemporary practice of doing things, but also to the establishing of values for practice of decision-making itself.

The second cultural feature of the local futures studies relates to democratic conceptualisation of political problems. A cosmopolitan and humanistic trust in an active role of human mind in creation of human future, which Comenius stressed in his idea of "pansophism" and which can be found also in many considerations of the Age of Enlightenment, was politically exploited 300 years later, by the first president of Czech and Slovak state, Tomas Garigue Masaryk, in 1918. His project of that state was based on the concept of humanistic democracy in which the citizen has an active role. Inhabitants must take care about their contributions to the public good themselves and create and protect democratic institutions for that purpose. The causes of a catastrophic fate of democracy in Europe and of a gradual restoration of totalitarian political systems in the first half of the 20th century were in Masaryk's explanation allocated inside the human being, in his psychology and education, rather than out of him.

Futures studies, according to that humanistic and anthropocentric political thinking, help to illuminate the conditions for an active role of everybody in the public life, offering the warnings and opportunities for his or her particular cultural activities. Such an approach, typical for the Czech cultural practice, has appeared also during so-called Prague Spring in 1968, when new alternatives of political arrangements were analysed and scenarios for the transition of local political practice to the "socialism with human face" were prepared. Possibilities of foreign interventions, coming from the contemporary "outer world", were allocated to the second plan of that project.

The third historically important cultural feature of local futures studies relates to the conception of technical skill. In the thinking of "technocrats" is that skill often conceptualised like a creative process, rather than an exploitation of artefacts for various cultural activities. Starting the 19th century was that technocratic concept intensively elaborated by engineering experience while the adaptation of human being to new technology remained as a task for

humanistic thinkers and their historical and actual experience dealing with the human behaviour. The care about social and cultural impacts of a new technology, which has appeared in futures studies practice in the second half of the 20th century, has been manifested in the Czech history by visions derived from humanistic and democratic ideology. The known novelist Karel Capek has introduced an idea of the "robot" in the world awareness. The possibility of the subjugation of human beings by "robots" like products of human technological creativity which have got out of the control of their creators, he declared twenty years earlier, than analytical warnings of ecologists and biological engineers had appeared.

Futures studies, according to the mentioned above features of local thinking, help to conceptualise the human cultural activities by watching the production and consumption activities in the contemporary cultural practice of human societies and by the interpretation and prediction of their technological forms and their many-sided impacts on the human life. The watching may not be separated from processes of evaluation of cultural activities. Therefore the futures studies fill an active role in creating the attitudes and morality of particular men and women by appropriate methodology of the reorganization of their backlogs of knowledge and help them to reshape their value attitudes and understanding the world, which are they living in.

Also the concepts of "deep futurology" and "futurology as a social movement" suits well to the recently manifested concepts of futures studies widespread mainly among members of the civic futurological movement in the Czech Republic.

2. Last fifty years of the futures studies

If evaluating the knowledge about the methodology of futures studies, then the Czech practice does not represent different backlog of knowledge in comparison with the world "state of the art". Differences originate thanks to peculiar ways of implementation of futures studies in the decision-making and are caused by the local demand for the knowledge about the future. Discrete periods of futures studies can be distinguished from that viewpoint. In the post-war period, the futures studies were stimulated by the technological policy induced by the cold war and arms racing between two contemporary world superpowers. Futures studies were provided by methods allowing to establish future values of main output characteristics of technological systems and gradually also of those systems, which were used by the state government and by enterprisers for innovation and production of new products and services. The Czechoslovak Communistic government exploited such practice for whole time, during which the system of centrally planned economy in Czechoslovakia was provided (practically till the end of its political power). That period has brought methodology of technological forecasting by historical trend analyses and by an extrapolation of values of particular output characteristics. Concept of managing the society according to the state plan allowed to exploit all methods suitable for controlling the behaviour of the society like a behaviour of "determined automaton". Productive and consumption activities of inhabitants were de facto predetermined by extrapolated volumes of output indicators in the central state plan. In sixties many futurologists spoke about that practice like about "forecasting, when the future is known". However, analyses and assessment of future development of human values and attitudes and forecasting their impacts in the cultural practice of the society, were completely missing there.

The mentioned above post-war period of futures studies practice development was finished in the democratic part of industrially developed countries in the fifties. Time extrapolation and trend analyses represented too narrow means for answering questions of those users, who felt unpleasant side impacts of innovative activities, either on the nature or on the human being itself. Today we can look back at first wonderful collections of forecasting methods, elaborated namely by Erich Jantsch (2) in sixties, and we can understand that contemporary

futures studies like "science in statu nascendi". Careful descriptions of methods were done, but an explanation how to choose the adequate method for given task of the user, was still missing in that time.

A strong innovative competition on world markets and also in arms racing induced new futures studies practice in sixties. Predicting the future values of discrete qualities of the "world" has become a mean for optimisation of particular developmental or capital investment projects (3). So called "technology assessment", "need assessment" and subsequently "social assessment" have entered the managerial and governmental practice as a new device by which futures studies help to formulate less risky goals for economic, social, environmental, foreign or other policies.

In that period we can speak also about futurology like newly born science discipline, which explores the arrangement of the cognitive activity of the decision-maker when he prepares goals for his actions and develops future oriented thinking for that purpose. During that period also university curricula dealing with forecasting methodology for decision-making have appeared and strategic or integrative studies have been cultivated with wider exploitation of already known forecasting methods. Social and natural impacts of new technologies in the cultural practice were evaluated by the development and implementation of new methods for the multi-access evaluation of "complex" social projects and developmental programs, also in the Czech academic practice in the late sixties. One of those projects, known under the title "Civilisation on the Crossroads" was provided by the interdisciplinary research team of the Czechoslovak Academy of Sciences, headed by the philosopher Radovan Richta. More than 80 experts elaborated the scenarios of the future development of industrial society, under the presumption, that its political regime could follow the practice of socialistic regime. In 1968 and 1969 were the results published in France, Italy and contemporary Russia and stimulated wide professional discussions among politicians and future oriented thinkers.

Futures studies in seventies and eighties, when so-called normalization process continued and the country was occupied by the Soviet army, were definitively divided. An "official prognostics" was methodologically subordinated to the state five years planning mechanism and was provided by forecasting services at the State planning committees for economy and for technological development. After 1978 also the Czechoslovak Academy of Sciences was engaged in forecasting the future development of scientific branches for the central planning system needs. The second stream represented by "unofficial prognostics" was subordinated to the civic interest in the renewal of democracy. Its institutional form was shaped mainly by private and academic initiatives.

An official stream stimulated evidence, measuring and extrapolation methods of forecasting values of all indicators, by which planned volumes of production were controlled. As a result namely Ministry of Technology has elaborated a system of forecasting of all main products, with respect to their expected quantities and innovations in the forthcoming 15 years. Analogically, the Academy of Sciences elaborated the list of most promising fields of scientific researches including their expected equipment by professionals and experimental technology for next 15 years. Finally State Planning Committee elaborated its visions of long-term development, in which expected innovations together with preferences of the Communist party were taken like goals for all productive and consumer activities of the population. The market economy analyses and social assessment of expected structural changes of the national economy were absent in that practice and only marginal studies of environmental impacts of planned technological changes were made by authors of forecasts.

Unofficial futurologists concentrated their endeavour to gathering knowledge about forecasting methodology from abroad and on critics of the official policy. Their results helped to formulate alternative strategies for political decisions what was publicly appreciated

namely after "velvet revolution" in 1989, when many members of unofficial prognostics became active politicians.

After the Soviet invasion in 1968 continued unofficial prognostics in the Czechoslovak Futurological Society (established by Milos Zeman in 1968). Its working team provided also future research, namely synoptic simulation models were developed and implemented for occasional users (machinery, regional management of water economy, electrical network, farming or physical culture and sport activity management, etc.). The implementation of those models was provided in seventies and tested in the local practice by private initiatives of authors (4) in cooperation with some institutes, whose management was ready to carry the adequate political risk. Authors often lost their job, when elaborated alternatives distinguished from those, which were made officially. In 1985 an unofficial activities were strengthened by establishing an autonomous department for forecasting at the more academically acting institution, Czechoslovak Scientific and Technological Society. Twice a month, more than hundred intellectuals were discussing alternatives to the existing political scene and their impacts on the life of Czech population. Their sessions were officially forbidden in 1987, but their leaders succeeded by renewing public conference and editorial activity in 1988, when best contributions from panel discussions were published by an unofficial journal "Prognostika". Thanks to that practice, a new independent and civic society for cultivation of futures studies and for the dissemination of their results into the society could be quickly established in 1990 .The Civic Futurological Society joined endeavour of various specialist oriented to the future. Its educational, conference and editorial activities were widened in 1992 by an institution of "The Inter-university Futures Studies Programme" and by establishing its Centre at the University of Economics in Prague. That professional institution coordinated futurological research at Czech and Slovak universities and organised conferences and editorial activity including research reports and textbooks. The Civic Futurological Society publishes futurological revue "Dialogues with the Future" since 1991 and holds international colloquium "Designing the Future in Europe" in a form of biennial, since the same year.

Evaluating last ten years of futures studies from the methodological viewpoint, a gap can be seen in comparison with an implementation of futures studies in institutionally stabilised industrial societies. The political implementation of futures studies in seventies and eighties was stimulated there by the existence of ecological, cultural and global problems in decision-making of local institutions. However, the needs of anticipation in domestic Czech official practice were in the same time generated mainly by short time interest in providing five-year plans. In the last ten years after velvet revolution, problems of performance of newly established democratic institutions caused, that the interests of the state government and enterprises were concentrated again on the short time decision-making. Futures studies at the Czechoslovak Academy of Sciences were interrupted. No research or pedagogical unit existed up to 2000, when the Center for social and economic strategies at the Charles University was established. (12).

The political stimulation of more long-term and complex thinking has appeared when Czech government have initiated project of strategic management for the governmental socioeconomic policy, in 1999. Futures studies for establishing national interests and dispositions for joining the EU are presupposed for that aim, together with strategic support of state region policy. In the Czech Republic continues also the cultivation of civic future oriented initiatives, namely for the support of an ecological movement and movement for sustainable life on the planet. They represent new and young energy, which stimulates futures studies and their implementation in the public policy (6), (7).

Futures studies are also supported by initiatives of Czech president Vaclav Havel. He has initiated an international conference Forum 2000, at which communicate prominent scientists

and statesmen and provide wide intercultural dialogue dealing with global problems and with perspectives of their solution by wide inter-human and inter-institutional cooperation all over the world (8).

3. Challenges to futures studies

Futures studies represent a specific part of contemporary thinking. Unfortunately, the daily "agenda" of our thinking changes rapidly, as plenty of innovations must be interpreted and evaluated if we want to formulate goals for our cultural activities. Our cultural environment is in a steady transformation. However, our psychological dispositions for thinking remain relatively constant for long historical periods and represent solid base for various ways of speculations and also for forecasting methodology. The question is: how to exploit our mind, mainly its logic, imagination, memory and other mental gifts for generation of such concepts about our future, which represent adequate information for contemporary decisions in that "fluid" cultural environment? A new culture of thinking seems to become necessary for establishing of information feedback loops, which are necessary for adapting the society to the changing social and natural environment. Relevant problems, involving question of appropriate sets of values, question of an arrangement of evaluative processes in the society, question of construction of new paradigm of the growth or the development of the society, seem to become future topics of the applied futurological research.

New way of future oriented thinking calls for a new approach to the data collection, and their outworking by the exploitation of an artificial intelligence. A "virtual reality" and operations with it seems to become a basic tool for good future research, if successful solution of serious political task will be wanted.

Pentti Malaska has pointed out that main structural changes in a regime of the information exchanges between human beings and their environment, have passed during transformation of a neolith to an industrial society and that another massive transformation passes recently, when "information" societies providing planned operations with mental artefacts have appeared in the human history. Futures studies were in a fast methodological development during the second half of the twentieth century, but it seems, that main changes are still on the horizon of today's cultural practice and that new logical device and new tasks will be formulated in a near future by those who try to solve their uncertainties by their minds.

A serious symptom of a growing demand for changes of our thinking about the future of public affairs represent uncertainties of participants of world markets. An absence of knowledge necessary for the control of market exchange operations is often caused by their inability to get the "right" information in a "right" time and to predict what will happen if the participation will be realised. The strategic thinking became impossible under such circumstances and governments or businessmen usually under-optimise their activities and often make hazards instead of creative behaviour (9).

Recent futures studies try to find the answer by an exploitation of the scientific methodology of analyses, modelling and forecasting, mainly. It means, that we are concentrated on data gathering and their systematic outworking by mental activities well established in "nature science" practice and widely implemented also in engineering sciences, including economics. An advantage of such mental "technology" of futures studies is, that under certain stable configuration of human attitudes to things and subjects of physical treatment, one could compute some features of future events. However, fast changing "world of values" of members of innovative societies, disqualify such methodology of futures studies for becoming an only source of adequate information for the survival. Some additional methodology of inter-human communication of knowledge, which will efficiently help to coordinate the information exchanges between particular knowledge and value sets used for selection of particular cultural activities, is needed.

In 1994 the author's research team tried to develop a strategic counselling system for deputies (10) under the presumption, that disciplinary structured knowledge about contemporary state of cultural practice will be systematically gathered and updated by teams of experts, and deputies will formulate their problems under the influence of their political experience and knowledge involved in the counselling system. In the same time deputies will help experts by dialogue to reformulate original disciplinary established interpretation of a given problem situation, in order to get more adequate information for practical political purpose. An experience with the implementation of that counselling system leads to the conclusion, that communication the knowledge between participants of the dialogue and the communication between disciplinary specialised experts, represent methodologically more complicated problem, than gathering and outworking the data about the subject of decision (11). In another words, the information benefits resulting from the futures studies are limited by existing technology of inter-human communication of empirically verified knowledge. Our ability to cope with variety of human attitudes in multicultural society and to reach consensus and common understanding the content of problem situation in a quickly changing information networks in our culture practice, need to be strengthened by some appropriate mental technology.

Are there on the horizon of our futurological activities some ideas about such "technologies" by which energetic and social disequilibria caused by failures of inter-human communication of knowledge can be reduced? It seems, that the idea of "doing by learning" can be accepted like a serious recommendation for that purpose. Let us join to establish common care about that problem, not only on the base of gathering the knowledge about outer world of human being (by building external artificial memories), but also on the base of common evaluation and common understanding subjects participating on our existence. The "technology" of such joining memory for data storing, the actualisation of decision criterions and the understanding the existential sense of the decision for the decision-maker, seems to represent the main challenge for tomorrow's futures studies.

That problem cannot be simplified by its reduction on ecumenism, economism, scientism or on any other specific cognitive practice. "To be in" means to reside in information networks, in which the "doing things" by cultural activities is provided and consciously managed by particular people and by their particular institutions. Tomorrow's futures studies practice look like a cultural service for creating and sharing expectations for particular cultural activities, rather than the practice of modelling the possible futures for an "universal" usage, only.

The futurology for human and humanistic expectations? Is it the right "futurosophy" for tomorrow? Anyway, futurologists can add serious information for those who try to build the regime of inter-human cognitive exchanges and who want to understand and to accept their mission like a cognitive engineering under specific cultural conditions!

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FUTURES STUDIES IN ESTONIA

Erik Terk

1. Institutes and futures research activities in years 1960-1990

It is quite hard to speak about futures studies in modern term at Soviet time in Estonia. There were some work related to long-term planning process, so-called predplanovoje razrabotki in Russian language (but without serious intention to originality from Estonian researchers engaged) and also some attempts of traditional economic prognostics by the initiative of individual academic researchers. Dr. Kaljo Kask's work in building industry prognostics and Dr. Raul Renter's in printing industry prognostics may be mentioned in the last field. From institutions Estonian Institute of Economics (of Academy of Sciences), Institute (before it laboratory) of Estonian State Planning Committee and Estonian branch of Central (All-union) Economic-Mathematical Institute's Tallinn branch must be mentioned. Some materials for students about economic prognostics were published by Economic Faculty of Tallinn Technical University (=Tallinn Politechnical Institute), but in general prognostics was not among main research fields of Estonian universities. Dr. Raul Renter published with his colleague Aleksander Schipai a book in Estonian, called "Economic and Social Prognostics" (1977) and defended doctoral theses on the topic of methods of prognostics in Moscow.

But there were two quite interesting fields more. In chair of Organization and Management of Economic Faculty of Tallinn Technical University some young researchers and consultants (Endel Oja, Ain Ivalo, Erik Terk) started to study modern western company level planning and corporate strategy building methodology and techniques, this job was continued later (after year 1978) in Estonian Management Institute. This field was partly connected with planning, partly with theory of decision-making (research of Dr. Madis Habakuk may be mentioned in this field) partly with futures studies. For example publications by French strategic planning theorists and Pentti Malaska were studied by Estonian researchers of this field at 1980s. New methodology of thinking (for example scenario-building) was used in consulting of companies, Later started some experiments of using this methodology on sectoral level topics.

Other example is connected with scientific interests of some Estonian philosophers. Club of Rome's reports were quite popular in Estonia at late 1970s and early 80s and some Estonian philosophers interested in global problems research. Dr. Lembit Valt (scientific field: methodology of science) and Edgar Savisaar published a book in Estonian "Global problems and futures scenarios" (1983). At year 1981 Edgar Savisaar (later initiator of creation of Estonian Popular Front and First Prime Minister of Independent Estonia) defended his candidate of sciences thesis on the methodology of Club of Rome's reports.

From 1986 Edgar Savisaar held a position of perspective planning department in Estonian State Planning Committee and he initiated at year 1987 a public contest for development of Estonian economy and its main sectors and fields. Special training for scenario-writing methodology based on the publications of Finnish futures studies specialists Pentti Malaska and Tarja Meristö and on some British publications and on Estonian domestic scenario-building experiences (mainly from company level) was provided by Erik Terk and Andres Saame. More than 30 teams of researchers (among them many later political figures) finished the contest with finished scenario packages about 10 of these presented a serious interest. Best scenario-packages were about development of rural life in Estonia (with the central point in reestablishment of private farming and real local government), about solving of housing problem in Estonia (connected with the hot problem of migration), about foreign tourism development and about developing of high-tech production in engineering industries. The

scenario-writing contest gave arguments for creation of "Economically independent Estonia's" project (from September 1987) and had quite significant place in political struggle towards independence at late 1980s.

2. Institutes and futures research activities after 1990

There was interesting experience of futures research from the time of Edgar Savisaar's Government (1990-1992): several times the team of Prime Minister's advisors (Ingrid Preeks and others) mobilised researchers from different fields for developing futures scenarios (of economic reform, political dynamic etc.) and for analysis of future's alternatives. For example the models of "Liberal development Estonia", "Green (sustainable) development" and "Continuing trends" were compared at year 1991. The analysis of these models by researchers was also broadcasted by TV.

The main centre is *Estonian Institute for Futures Studies* (established in December 1991, really started to work from Spring 1882). There are some other enthusiasts of futures studies also other institutions (Dr. Alari Purju from Economic Faculty of Tallinn Technical University of Human Geography of Tartu University, Dr. Raivo Vilu from chemical Faculty of Tallinn Technical University), but all these people have some kind of connection with Estonian Institute for Futures Studies (EIFS). Some of these people worked in Estonian Institute for Futures Studies in some period, some participated in institute's projects. Dr. Marju Lauristin from Institute of Journalism of Tartu University (previous deputy speaker of Estonian Parliament and Minister for Social Affairs) participated in some international futures studies projects (for example project: Futures scenarios for Northern Europe), she also had cooperation experience with EIFS.

The main research fields of Estonian Institute were:

macro-economic development scenarios of Estonia;

future trends and scenarios of Baltic Sea countries, regional cooperation perspectives (for example Estonia-Finland);

future of regional disparities in Estonia, future prospects of main Estonian regions;

personal income differences in Estonia (by social groups, regions, sectors etc.);

perspectives of main economic sectors of Estonia and main "national business ideas": transit transportation, food processing industries, engineering industries etc.;

problems of Estonian accession into EU;

future of Russia and it's impact on Estonia's future prospects;

national innovation system, product and technology development in Tallinn.

In 1997 EIFS worked out four development scenarios for Estonia ("Estonia 2010" project): "Ferryman scenario", "Southern-Finland (or "Scandinavian periphery") scenario", "Military info-oasis scenario" and "Great Slam (or "Interface") scenario". These scenarios were discussed with all political factions in Estonian Parliament, in Government (Cabinet) meeting, with high level officials and regional leaders and also widely discussed in media.

Later model calculations were done with macro-economic model of Bank of Estonia to find the balance of payment parameters by each of mentioned scenario.

In 1999 document called "Guidelines for Estonian spatial development (until year 2010)" was prepared by team from EIFS. This document was approved with some corrections by Government of Estonia in July 2000. At year 1999 three scenarios for development of Central Baltic Sea Region (until year 2015) were prepared by international working group leaded by EIFS specialists and using EIFS methodology. At year 2000 work on integration scenarios of Tallinn and Helsinki started.

Quite popular in Estonia (from late 80s till now) is the future of education topic. Several packages of scenarios and strategic conclusions are prepared. Special NGO "Estonian Education Congress" is active in this field Krista Loogma from EIFS is engaged in these studies.

Some year ago the sustainable development problematique also become popular in Estonia. Tallinn Centre of Stockholm Environmental Institute is active in this field.

3. The questions of Today

It was very popular in Estonia at late 80s, when the interest went down from year 1992 (problems of survival and short-term tasks in economic restructuring situation) and new step-by-step rise of interest approximately from years 1994/95. Last years "outside pressure" (from EU, UN, WB) to have some long-range development orientirs (for example National Development Plan) is quite important factor.

The problem is, that Estonian state officials become too "outside driven": "If for example EU is demanding to work out some long-term strategy development, then let's do it, but by general for us the medium-term documents are enough".

Just now the only case of futures studies training in Estonian universities is a short course in Tallinn Pedagogical Institute. Institute of Geography of Tartu University is starting something like "Modern Strategic Planning" course.

About youth: I may to give only some speculations on this topic. Probably they have quite interested in futures questions (connected with career planning etc.) but more about medium term than long-term.

FROM ANTICIPATIONS OF A BRIGHT FUTURE TO DISSOLUTION

Karlheinz Steinmüller

1. Introduction

Future - the bright socialist or communist future - was one of the key words in official propaganda in the German Democratic Republic, as it was in all socialist countries. For some time party¹ ideologists were able to convince at least parts of the population, that the future belonged to socialism and that there was a steady progress throughout the world towards a communist future. Consequently, the relation of the political system to a more open thinking about the future was never without tension: If you knew already the outcome of history, why bother to spend much thought about it? If history follows only one line - delineated a century ago by Marx and Engels - there was no place for thinking in alternatives, no room for openminds. As I. Bestuzhev-Lada observed, dictatorship and forecasting seem to be mutually exclusive (*Bestuzhev-Lada*, 1992). Nevertheless, there were some attempts to establish futures studies in the GDR.

2. Following the Soviet model

In the early years of the GDR the future was not yet subject to specific studies. The doctrines of Marxism-Leninism, which was established at that time at universities too, seemed to answer all questions about things to come sufficiently. As there was no place for "bourgeois" disciplines as psychoanalysis or cybernetic, there was none for a specific futurological discipline. Marxism-Leninism provided the base for all approaches to the future, were they academic or popular.

Popular interest in the future was stilled mostly by translations of Soviet books like Sachartchenko's "A Voyage into Tomorrow" (1954). Soon East German writers began to follow their example, e.g. Karl Böhm and Rolf Dörge with "Unsere Welt von Morgen" ("Our World of Tomorrow", 1959). Writers like these depicted primarily technological developments: computers, automated factories, space travel, an industrialised agriculture and the benefits of nuclear energy - but they grew not tired of stipulating, that cornucopia would come only with the new, socialist society. In that way they promoted "Perspektivbewusstsein" - the "awareness of the prospects" of communism and of the superiority of the socialist system. Like others, even later dissident Stefan Heym ("Das kosmische Zeitalter", "The Cosmic Age", 1959) emphasised the main catch-phrase of that epoch: "The future has already began. It can be seen in the Soviet Union".

3. The race to the year 2000

During the 1960s, the future became a subject for more specific research attention. In this regard the GDR followed the developments in other countries. Science and technology progressed rapidly and produced new challenges for each of the two systems. It was felt that propaganda alone - making appeal to the image of a bright future - did no longer suffice for the global competition of socialism and capitalism. But even disregarding the confrontation with the Western system, there was a need for more - and more practicable - information about future trends as a foundation for decisions to be made and ways to be chosen: How to organise society in the age of the global transition from capitalism via socialism to communism? How to "unbound" the productive forces? How should the economy be planned in that age of transition? How could scientific-technological progress be "mastered" to the benefit of the people? These questions got even more profile with the introduction of the "New Economic System of Planning and Direction of the National Economy" (1963).

The influences of Western futures studies were considerable. Contrarily to the usual policy of ideological isolation, even one West German futurological book, Fritz Baade's "Der Wettlauf zum Jahr 2000" ("The Race to the Year 2000", 1960) was published after some years of delay in the GDR - because it forecasted that the East would be the winner in that race. Herman Kahn's and Anthony Wiener's "The Year 2000. A Framework for Speculation on the Next Thirty-three Years" (West German title "Ihr werdet es erleben", "You will live to see it", 1967) found a self-confident answer in the East German publication "Wir werden es erleben" ("We will live to see it", 1971). As an integral part of reception, Western futurology was heavily criticized as a "bourgeois pseudo-science" and an apology of capitalism, without the sound basis of a social theory, technocratic in its approach and eclectic in style.

4. Prognostics

In distinction to futurology, the word "prognostics" (Prognostik) came in the second half of the 1960s into use - after the 11th plenary session (1967)² and one year later the VIIth party congress of the SED had declared that "the Marxist-Leninist societal prognostics is a decisive instrument of scientific leadership for shaping the developed social system of socialism in the GDR" (see e.g. Edeling, 1968, p. 12). Here, like in many other cases, the GDR followed the model of the USSR, where new efforts of forecasting and planning were undertaken from 1966 onwards (see Bestuzhev-Lada, 1992 and Steinmüller, 2000).

Prognostics was not at all meant to be, as the term may indicate, a socialist counterpart of (technocratic) forecasting. In the perception of that time, it was nevertheless strongly connected with cybernetics, a formerly rejected discipline which was rehabilitated by the philosopher Georg Klaus³. Prognostics should be based on the knowledge of the "objective law of social development" (i.e. the dialectics of productive forces and the mode of production), and it should by itself undergo a dialectical relation with planning and shaping the socialist society (see e.g. Edeling, 1968, p. 228). In fact, prognostics reflected the planning euphoria of that age, which inflicted both systems equally.

In theory prognosis and planning should form a dialectical relation, but in practical life the gulf between optimistic long-term visions and academic thinking about the future on the one hand and the problems of planning for the next four years on the other hand widened. Actually, prognostics had no real influence on planning, it was effectively neutralised by attaching it to long-term planning ("Perspektivplanung"). Moreover, it never became really institutionalised - despite a short-lived "Institut für Prognostik beim Ministerrat der DDR" (Institute for Prognostics at the Council of Ministers⁴) and attempts to coordinate all prognostic activities by the Academy of Sciences (Heyden, 1968). Several organizations engaged to some degree in prognostics: Institut für Gesellschaftswissenschaften beim ZK de SED (Institute for Social Sciences at the Central Committee of the SED; this institute had a specific chair of social prognostics), Institut für Wissenschaftstheorie und Organisation der Akademie der Wissenschaften (Institute for Theory and Organisation of Science of the Academy of Sciences), Zentralinstitut für Wirtschaftswissenschaften der Akademie der Wissenschaften (Central Institue for Economic Sciences of the Academy of Sciences), the faculties of economics of several universities and others. But prognostics never became effective most studies performed by these organizations were confined to basic questions of the philosophy and methodology of prognostics.

The late 1960s and early 1970s became years of widespread futurological publications. Philosophers and economists, but also social scientists and physicists wrote about the future of society and technology. Newspapers invited their readers to speculate about the year 2000⁵. G. M. Dobrov's seminal "Prognostics in Science and Technology" appeared in German translation (1971). First steps towards a science of sciences ("Wissenschaftswissenschaft") were undertaken. But as in former years, the ideological fight against Western futurology continued (see e.g. Bönisch, 1971). It gained specific momentum by rejections of

convergence theory, then in its heyday, which assumed a slow opening and transformation of the socialist system under the impact of the scientific-technological revolution.

5. Confronted with the Limits to Growth

The short spring of prognostics ended about 1972. There are two reasons for that: an internal one and an external. During the early 1970s it became evident, that all hopes of "Überholen ohne einzuholen" ("Taking over without catching up" of capitalism) were wishful thinking. The GDR - and all the socialist bloc - lacked the industrial capacity to come up to the promises of an alleged technological lead-start. Investments into high-tech industries had to be cut down, the people called for a higher living standard. With Honecker's succession to Ulbricht and even more with the VIIIth party congress of the SED (1971) an economic and social re-orientation started. It was also the end of cybernetic planning optimism for the GDR.

Nearly at the same time the first report to the Club of Rome "Limits to Growth" (1972) appeared. It had tremendous impact not only in the West, but likewise in East German academic circles - and also in the public. Reactions were soon to follow. In newspapers as well as in academic publications "Limits to Growth" was rejected as a product of neo-Malthusian doomsday thinking, not taking into account the principal difference between capitalisms (which is not able to solve its social, environmental etc. problems) and socialisms (which solves these problems). Later reports to the Club of Rome found a more differentiated official reception. All of them were circulated widely in academic and non-academic circles.

The politics of détente between East and West slightly improved the climate for futures studies. East German scientists collaborated with the International Institute for Applied Systems Analysis at Laxenburg/Austria (founded in 1972). International exchange - also to questions of the future - became less restricted.

6. In the years of decline

During the 1980s, futurists in the GDR should have followed H. Kahn's phrase: "thinking the unthinkable", i.e. the end of the communist system. With a subliminal feeling of crisis, not to speak of doom, social and mental barriers against futures studies grew. Studies, whose outcome was not welcome to party leaders, were classified (e.g. studies about right-wing extremist tendencies within parts of the East German youth). Environmental problems, even problems evindent to everyone, were denied. Official propaganda more than ever was whistling in the dark. Sometimes it obtained a grotesque character: The economist Erich Hanke postulated in his book "Ins nächste Jahrhundert. Was steht uns bevor?" ("Into the next century. What will come to us?", 1984) that communism would be achieved if every family earned a monthly income of about 5000 (East German) Marks. And this would be the case sometime between 2020 and 2030.

At that time, futures studies as a discipline were rather non-existent. When Bönisch wrote his critique of recent tendencies in bourgeois futurology (Bönisch, 1985), he wrote also about socialist alternatives in the field of futures studies - and came up with the political and economic program of the SED: activities to make peace more secure; experiences of socialist countries with successful planning could help to overcome global problems; the transition to an intensive type of reproduction that absorbs less resources. Futures studies by themselves had been absorbed into the daily business of politics and ideology.

But from the grassroots - or as a kind of counter-culture -, a new concern about the future grew, partly within the small opposition movement, partly under the roof of the churches, partly in academic institutions, but mostly without any definite organizational basis⁶. Quite generally, futures thinking - in the form of concern for ecological problems, of the peace and civil rights movement - contributed to the fall of the system.

7. The aftermath

1989, the "freedom revolution" and the fall of the Berlin Wall came as a wild card, a highly improbable, maybe implausible scenario, foreseen only by very few persons.

In the subsequent years, East German science was restructured and integrated into the West German research landscape. Nearly nothing remained of GDR's "Science of science", some researchers found their way into technology assessment or related areas. From the point of futures studies, there is no heritage. Some lessons - about mental and structural barriers for futures thinking - could be learned. But that is all.

Futures studies never managed to become a distinct branch of science (or the humanities) in the GDR, there were no specific journals, no specific institute (with one short-lived exception), no specific university courses.

But the circumstances in the GDR can be blamed only for part of this lack of institutionalisation. A parallel history of futures studies in Western Germany would show some similar deficiencies at least in the academic sphere. As a multidisciplinary approach futures studies have still problems to be accepted as a worthwhile scientific enterprise.

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FUTURES STUDIES IN HUNGARY

Erzsébet Nováky

1. The beginnings and organisational/institutional background of futures studies in Hungary

Taking an interest in the future and beginning to study it in a systematic and scientific way, including university-level tuition too, date back to the mid and late 1960s in Hungary. It was then that a scientific approach to and the study of the future emerged at several institutions, motivated primarily by a reaction to the development of the sciences in the international field.

Coinciding in time with the founding of the Club of Rome, in 1968 University Professor *Géza Kovács*, at the time head of the National Planning Department of the (then called Karl Marx) University of Economic Sciences, introduced a new seminar specialising in futures research. This type of research seminar was a novelty in a number of ways at the university, partly because futures research itself was a new branch of science and partly because of the special organic unity between research and teaching. This research seminar exerted a particularly strong influence encouraging through the undergraduates too the introduction and development of futures research at further places of research and other universities. This is the reason why Hungarian futures researchers and foreign futures studies centres alike regard the research group headed at the time by Professor *Géza Kovács* as the cradle of futures research in Hungary.

Work at the National Planning Department of the University of Economic Sciences was characterised by a future vision-oriented, long-range, complex and integrative approach, by a striving to renew theoretical and methodological issues of futures research, and by a futureoriented handling of questions related to the challenges of a given period in time within the complex whole. All this played an important part in establishing the research group as a place that created and maintained a school of thought. The research team of the Department of Statistics headed by Lajos Besenyei dealt with the statistics-oriented prognostic aspects of futures research as well as making practical, short-range forecasts. The futures studies group at the Department of Philosophy of the Budapest Technical University, headed by Judit Fodor, delved into the philosophical and epistemological issues of futures research and investigated the future of man and education. At the Semmelweis University of Medicine, Erzsébet Gidai was the first to deal with futures research. Working mainly with literature in German, she strove to make futures research strike roots in Hungary too. The Science Organization Group of the Hungarian Academy of Sciences, headed by Lajos Szántó, focussed on working with and discussing both international and Hungarian special literature, and on systematising the obtained knowledge.

The fact that a number of individuals at different universities and academic research institutes began to deal with diverse aspects of the future on their own, thereby enriching and broadening the thematic scope of futures research in this country, was a peculiar feature of the early days of futures research in Hungary. The following research centres and researchers must be mentioned by all means: the Department of Transport of the Budapest Technical University (Kálmán Kádas), the Department of External Economy of the University of Economic Sciences (Imre Korán), the Janus Pannonius University of Pécs (Béla Sipos), the Hungarian Academy of Sciences' Institute of Philosophy (Ervin Bóna), Institute of World Economy (Mihály Simai), Institute of Economic Sciences (Ferenc Jánossy), Institute of Home Trade (Radmila Verstovshek), the University of Miskolc (János Czabán), the University of Szeged (László Tóth) and the University of Debrecen (Csilla Kemény).

The different research teams and academic workshops dealing with futures research varied in the pace and extent of becoming institutionalised. The process turned out to be the

smoothest in the National Planning Department of the University of Economic Sciences despite the fact that the Group headed by *Géza Kovács* had to undergo a number of organisational changes within the framework of university reforms. In 1979, when the National Planning Department became the National Planning Institute, the Group was organised as the *Section on Futures Research*, and in 1989, when the institute was replaced by the Macro Planning and Modelling Institute, the institutional *Department of Futures Research and Planning* came into being under its aegis, this time headed by *Erzsébet Nováky*. In keeping with the comprehensive educational and organisational restructuring under way at the university, in 1992 an *independent Futures Research Department* was established in the Faculty of Economic Sciences, only to be transformed in 2000 into the *Futures Studies Centre* at the Faculty of Business Administration.

The Futures Studies Centre of the University of Economic Sciences has benefited, in the shape of the *Futures Research Group*, from the intellectual and financial support of the *Hungarian Academy of Sciences* since 1974. The research team was headed until the end of 1998 by university professor *Géza Kovács* and subsequently by university professor *Erzsébet Nováky*, who is also head of the Futures Studies Centre.

The Department of Philosophy of the Budapest Technical University has kept an open mind toward the future amid all the organisational restructuring. Cultivating and teaching futures research have always been in close harmony with the university's profile and have adhered to the changes in the thematic points of view of the research centre. As a consequence of the implemented university reforms, it is now the Department of Innovation Studies and History of Technology that deals with the future in a systematic way under the guidance of Mrs. Attila Tóth.

The research work of the *Semmelweis University of Medicine* was transferred to the Institute of Social Sciences of the Hungarian Socialist Workers' Party and, subsequently, to the Economic and Social Research Institute of the Trade Unions. The work was carried on by *Erzsébet Gidai* in the Institute of Social Research and Forecasting.

Futures research at the *Janus Pannonius University of Pécs* acquired a specific character early on. The activity of *Béla Sipos* focussed on forecasting the future of business, labour and prices, and on examining and forecasting short and long-range cycles. In the 1990's they established a research team at the *Strategic Management Department* and began to focus on computer-assisted financial forecasting.

The Department of Business Economics of the University of Miskolc specialised in company and organisation prognostics (János Czabán), while the Department of Statistics and Accountancy focussed on business prognostics (Lajos Besenyei). The Institute of Economic Sciences of the University of West Hungary (in Sopron) has also been dealing with futures studies since the mid-90s.

Cultivating and teaching futures research at university level have become more and more widespread, but only at the University of Economic Sciences has an independent department been founded.

Practical forecasting work has been undertaken mainly in nation-wide institutions where the long-range management of problems has made it necessary, such as the *National Committee for Technological Development*, the *Scientific and Planning Institute for Urban Development* and in *sectorial ministries*. The role of the *National Planning Office* must be emphasised among the other nationwide institutes. Although the Office itself did not conduct systematic futures research, its executives realised the convenience of elaborating long-range macro-level plans on forecasts relying on a scientific basis. The National Planning Office, therefore, assisted the development of futures research as a branch of science by commissioning long-range complex forecasts. It also made efforts so that the results of futures

research be put to use in the process of drafting plans and of decision-making on the state level.

Looking into the future became part of the activity of the *Central Statistical Office* too, albeit with an emphasis on short-range economic forecasts. In the 1990s, Hungary's banks and the Ministry of Finance also joined forecasting activities related to economic macro indicators.

Having assessed the research carried out and the scientific results achieved in the field of futures studies, in 1976 the *Hungarian Academy of Sciences* established a *Futures Research Committee* to function within its Section of Economic and Law (which was later extended to include sociology, demography and public sciences too). The president of the Committee was *Géza Kovács*, the founder of futures research in Hungary, who remained in that position for 12 years. From 1988 the presidency went to *Erzsébet Gidai*, to be followed in 1999 by *Lajos Besenyei*.

2. Historical periods of futures studies in Hungary

In the course of the 30 years that have passed since the early days of futures research in Hungary a sufficient quantity of knowledge and experience has been amassed for us to look back on the road covered from a historical perspective and from various points of view. Although the activities of Hungarian futures researchers have always focussed on institutionalising futures studies in Hungary, on broadening and widening the theoretical and methodological questions and on satisfying the practical needs, each of the three decades displays its own, different character.

In the first decade, futures research, having overcome the ideological prejudice manifest upon the emergence of new sciences, was closely linked to the socialist system of planned economy constituting its so-called outer sphere. There was a definite endeavour, at the same time, for futures research to prove its independent character as a branch of science and to be accepted as an academic discipline. In the second decade, futures research strove to distance itself and become independent from planning. Attention was increasingly channelled into elaborating scientifically-based future possibilities. It was in this phase that Hungarian futures research came into mutually beneficial contact with the international vanguard of futures studies. In the third decade, conscious and non-conscious thinking about the future gained impetus even on the level of the individual. The results achieved by futures studies became widely incorporated in other sets of knowledge and in the process of strategic thinking. All this reinforced the emergence of alternatives in the way of thinking and paved the way for a change of paradigms in futures studies.

The following essentials correspond to each of the three decades:

the first decade: between 1968 and the late 1970s -

the early years: the period of proof and acceptance,

the second decade: between the late 1970s and the late 1980s -

the years of stabilisation: the period of busy labour,

the third decade: between the late 1980s and the late 1990s -

the years of renewal: the period of diversification for futures studies in Hungary.

The diverse research character of the three decades is manifest in scientific research, teaching and the trends in national and international relations. In what follows, the diverse character of these three decades will be presented through the changes taking place in these three fields.

3. Scientific research

The peculiarities of the three decades are easy to trace if we examine in each the theoretical-methodological subjects we investigated, how the comprehensive Hungarian visions of the future were drawn up and the trends in our practical research.

3.1. The period of proof and acceptance

a) The period of the 1960s and 1970s meant a boom and institutionalisation for futures studies in the industrially developed western countries. As a consequence, we focussed our research work on disseminating the findings of international research and adapting in Hungary the theoretical-methodological-technical results of futures studies. Like other social studies, futures studies is not devoid of worth. Therefore, the new science's system-specific features customary in the countries of East and Central Europe had to be discovered. Seeing that futures research in Hungary was launched in the socialist system, naturally we sought to establish a link between futures research and planning. Futures research provided a range of variations wider and more novel than customary in planning, thus loosening up the rigid system of planning. Long-range futures studies offered orientation possibilities first and foremost for long-range planning, which in turn provided greater scope for futures studies to raise novel issues and to seek novel answers.

We set ourselves the task of collecting and systematising the methods applicable in futures studies and researched the way they could be adapted in Hungary. In the first decade, we integrated methods of forecasting based on mathematical-statistical procedures into the methodological storehouse of futures research in Hungary, since recognising the more or less unchanging and still prevailing trends and "calculating" the probable (and possibly even the most probable) future possibilities definitely took centre stage in futures research at the time. These methods emphatically assisted economic forecasting and made it scientifically more well-founded.

Analyses facilitating the cognition of world models and global reports, as well as method-specific studies were closely linked to methodological research. These studies paved the way for our attempt to apply methods used in world models to smaller (i.e. country-sized) regions. We linked dealing with global problems to specifying them within the context of Europe and East and Central Europe, thus contributing to the system of objectives of our long-range plans becoming embedded in an international context.

We paid particular attention to the relation between futures research and social planning. The topical tasks of developing futures research were caused, partly as a consequence of debates concerning futurology, by the uneven progress of making future visions and prognostics. This is why research into making future visions became particularly relevant. We elaborated the structure of the future vision and the content of its elements, linking it to social planning. As separate elements of the future vision we considered the natural environment, the technical-economic basis of society, the population figures and social stratification, as well as the categories of lifestyle and values.

b) Work on elaborating future images began in the late 1960s in the research seminars of the University of Economic Sciences. *The first Hungarian complex long-range future image*, which went up to the year 2000 and thus significantly surpassed the time period (1970-1985) in the officially accepted macro-level, long-range plan, focussed on the net national product per capita. In our forecast for the turn of the millennium we put the desired level of this index at USD 4000, the lower threshold of a post-industrial society. For this, a figure surpassing even the US index of the time, we sought an adequate socio-economic structure in Hungary. In our forecast, Hungarian society at the turn of the millennium would not differ essentially from that of the 1970s as regards economic activity, but would show considerable difference as regards the number of active wage earners and the dependents. We considered the transformation of the structure of employment of vital importance, foreseeing a drop in the agrarian population and a substantial rise in the different branches of the service industry, particularly in scientific research and education. We believed that the more developed and more complex the production processes became, the greater proportion of the workforce would be tied down in education, research and development. The distribution of active wage

earners according to the employment structure would differ from the structure that prevailed in the 1960s and 1970s, pointing towards more modern economies. For the period covered by our forecast, we indicated as indispensable that there be significant improvement in the amount of means of production needed and the efficiency of capital assets and accumulation, and that the economic structure undergo a thorough transformation and modernisation.

We applied the so-called top—down approach, using the philosophical principle that micro processes can be reached from macro processes and that the development of the economy determines all other (social, technical-technological and ecological) processes. Even by the means of this methodology we realised and warned about what the more or less unchanging trends foreshadowed as economic hardships that could be expected in Hungary by the 1980s.

c) Satisfying the practical needs in Hungary meant a multidirectional activity. Let it suffice for our purposes now to mention only the studies related to scientific and technological development, water management, transport, the construction industry and urbanisation among the complex structured, sectorial and regional surveys.

3.2. The period of busy labour

a) In the second half of the 1970s and the 1980s the need to seek a qualitatively different, new future arose with increasing persistence. The theoretical-methodological research of the day ranged in Hungary from the investigation of lasting trends through the study of lasting but temporary processes (the so-called "grey zones"), to turning points in development and the newfangled problem management of forecasting qualitative changes. We made a thorough study of modelling the future, the possibilities of forecasting the crucial turning points and social processes, as well as the brand new interrelation of society, the economy and the natural environment.

Futures studies in Hungary looked for new methods in order to elaborate the alternatives. For the purposes of our investigations, we extended the circle of mathematical-statistical methods used and thus we relied more and more extensively on the power functions containing the turning point(s) and the logistic curve. The envelope curve calculations provided a basis for the study of level breakthrough. With increasing regularity, we applied methods based on consulting, such as the Delphi method and the SEER method. Among the modelling methods, we further developed the cross impact method striving to make the algorithm easier to follow: we quantified the interaction between events and trends as well as the limits of probability ranges. We interpreted the extent to which forecasts are verifiable and reliable and worked out a method to "measure" the latter.

b) The second complex long-range future image elaborated in the mid-1980s with the participation of experts from the Futures Research Committee on of the Hungarian Academy of Sciences targeted the period leading up to 2020. This time we focussed on the basic needs of the individual (nutrition, housing, health, schooling and the environment) endeavouring to establish how the growing demand could be met. We were the first to rely on futures studies to establish the range of basic necessities and their fundamental features satisfying which was of utmost importance from the point of view of the long-range balanced development of Hungarian society and the spread of harmonious character traits of the members of that society.

Applying the bottom—up approach, we abided by the philosophical principle that the economy must strive to satisfy the needs arising in society. We concluded that scientifically-based growing needs could be satisfied only by developing science-intensive production and services.

c) In the future-sensitive domains we paid particular attention to the future of social processes, primarily of education, housing and health, and the assessment of these from the point of view of the development of society as a whole. One of the most remarkable undertakings of the 1980's was outlining the socio-economic alternatives of development in

Hungary until the turn of the millennium, including even catastrophic future alternatives, and examining the interaction of the Hungarian economy and the environmental subsystem and forecasting their reciprocal influence. In connection with the latter we relied on the multidisciplinary model (which composed of the sub-models of economy and environmental sectors) to determine whether there was any forecast that was favourable to the Hungarian economy and to the state of the environment alike. Unfortunately, no such forecast was found amid our Hungarian circumstances, as no strategy equally desirable from the point of view of the economy and the environment could be worked out without a radical change in the character of the relationship between the economy and the environment. This also signalled that in future profound changes were necessary in the economy, society and the technological structure, something that futures studies must indicate in advance.

3.3. The period of diversification

In the late 1980s and early 1990s futures studies in Hungary also realised that in order to be able to interpret the behaviour of dynamic systems in a more complex way and to forecast their future state a new philosophy, methodology and methodological means must be found. The future state of systems in an unstable condition is impossible to forecast in the sense that their future state is unpredictable, in other words cannot be foreseen with precision. Scientific prediction, therefore, becomes impossible amid unstable conditions, namely we cannot forecast the new state or future behaviour of the system with precision. In chaotic and/or slightly chaotic systems the desire (and possibility) of drawing up the single (most probable) version of the future must be given up and building a variety of alternatives and scenarios must be favoured instead.

a) Theoretical-methodological research in Hungary, therefore, focussed on the complex investigation of dynamic systems, the study of the behaviour of complex great systems, ways to apply chaos and evolution theories in futures studies, the trends of futures studies (particularly evolutionary and critical futures studies), their relations with the post-modern current of thought, and the extent to which evolutionary modelling and forecasting came true.

This decade brought some novelties also in the methodological arsenal of short-range prognostication in Hungary. The systematisation and further development of the theoretical background and methodological means of business cycle research, as well as the development of the mathematical-statistical means of business and financial prognostication and the building of its system of information technology coincided with the new demands made on futures studies and forecasting. Accounting, statistics and prognostics came to display closer ties than before.

Researching the repercussions in futures studies of the change of the social and economic era, with particular emphasis on globalisation and regionalisation, and researching the concept of the future of certain trends in economic theory were the products of this decade too. The rise in value of the role of the human factor, the individual directed the spotlight onto research on future orientation. Determining the components of future orientation made us more familiar with the way Hungarian people, including mainly the youth, companies and enterprises, related to (and feared most about) the future.

b) We applied a new type of approach in our investigation of *the complex image of the future* carried out between the 1990s and the turn of the millennium. This was warranted by the fact that the conditions of forecasting had changed considerably since the late 1980s. A change had set in the way the socialist countries, collapsing one by one like a domino puzzle, related to the developed West and the globalising world, in the progress Hungarian society made on the road to democracy and in the way people articulated their individual opinions and aspirations more forcefully than before. The main characteristics of the new approach are the following:

forecasting is done amid the change of paradigms in a broad sense and the conditions of instability in a complex sense;

the survey gives greater relevance to the individual, primarily as a bio-psycho-social being who relates to the future in a way more direct than before and who, by interpreting a greater variety of future variations, wishes to obtain/retain greater freedom to choose and to decide;

the individual must come up to and conform to the expectations of the future even amid the changes, catastrophes and future shock factors besetting society, nature and the economy; all this may be assisted by the new social and individual values;

the new type of investigation of the vision of the future breaks with the notion that the level of development and the future course of development of the economic subsystem unequivocally determines the society of the future, so the numerical forecasting of conventional macro indicators (e.g. the GDP) is relegated to a minor role, while more attention is focussed on questions reflecting the interests and values of the members of society, such as the future orientation of individuals and institutions.

The fundamental dilemma of working out a new image of the future is that today it is impossible to outline the probable (or the most probable) future version and the image of the future built upon it. What can be attempted is to seek future alternatives by discovering the links between the possible future versions which are desirable for the individual and society and which can be detected from the development of the economy and politics. In order to elaborate these with a philosophical approach we opted for the combined application of the top—down approach (which sets out from the macro processes of the economy and politics) and the bottom—up approach (which sets out from the attitude to the future of the individual and social institutions). In this framework we were able to compare the possible versions of the future offered by the economic and political conditions, and the versions of the future desired by society and its members. This comparison could not serve as a balance, however. Nor could it be carried out like before, in a more or less mechanical way, because - due to the instability of the processes - the balance (and stability) do not come automatically, and at the same time the members of society now have considerable powers to shape the future.

Instabilities (sensitivities) emerge in processes making up the future, in expectations related to the future and in the interests joining the two. It is the change in the values that expresses what society and its members want to and are willing to accept from among the future possibilities ahead of them. Linking the possible with the desirable provides a basis on which to outline the future variations, which can then be put together as future variations and future alternatives. We do not seek the optimal or the desirable future alternative, but present alternatives that are acceptable. The criterion of being acceptable is that the future alternative allows society and its members more latitude, that it allows charting different courses (i.e. different life and professional careers in the case of individuals) and progress along those. Seeking more latitude also expresses the need to create, to "make" the future together with the members of society. That is how the image of the future became Hungarian in character. The variety of future variations indicates that the social and economic future of Hungary is not yet decided, so forming and shaping it is still possible.

c) The profile of practice-oriented research was renewed and enriched by new additions as a result of the market economy and other factors emerging in the wake of the change of regime. We investigated the relation between community and market decisions; the connection between futures studies, the information technology society and marketing; the futures studies components of the analysis of technological efficiency; the new specifics of business and entrepreneurial forecasting. We had World Bank support to conduct research into the relationship of vocational training and socio-economic development, after which we relied on wide-ranging empirical surveys to work out possible alternatives for the development trends in vocational training. With the financial backing of the so-called *OTKA*

(Hungarian Scientific Research Fund) programmes we have researched since 1991 a number of theoretical-methodological questions of futures studies, such as the socio-economic development of Hungary, forecasting socio-economic conflicts, Hungary beyond tomorrow, modernisation and social security, paradigms in futures studies, non-conscious and conscious attitudes to the future, modernising the methodology of futures studies in the period of transition, new methodological approach in futures studies, the application of the chaos theory in futures studies, evolutionary models in futures studies, analysing financial time series and further developing their forecasting methods, short-range prognostics models, computer models and tools in prognostication, business cycle research, the role of multinational corporations in business cycle research, forecasting trends in the world economy and their expected repercussions in the security of the Hungarian economy, the local prevalence in Hungary of a global vision of the future, the vision of the future of Hungarian education, the social, economic and structural effect of the village on regional agrarian production, the vision of the future of Hungarian librarianship, possibilities of linking strategies of different time spans, and the turn of the millennium before and after us.

With our work, we link onto the research activities of nation-wide strategic institutions and take part in determining the development trends of small regions. These activities show our more intensive participation in the preparation of decisions.

The greater freedom in both Hungary and the international atmosphere has helped us to carry out valuable research, the results of which have been widely acclaimed. All this provides a sound basis for us to participate in international conferences. The number of our publications abroad has also shown a promising increase.

3.4. Scientific results displayed

The results we have reached in the field of futures studies are documented in books, textbooks and university course books, and in studies published in scientific journals and delivered as conference lectures. Books on the theoretical-methodological aspects of futures studies can count on widespread interest and they are particularly informative. The list of comprehensive books on futures studies published in Hungarian and in foreign languages between 1970 and 2001 can be found as part of the bibliography at the end of this study.

Prognostics, launched in the 1970s and practically the only medium until the 1980s, published by the Science Organisation Group of the Hungarian Academy of Sciences, provided an excellent forum for futures studies publications. Since the 1980s *The Economy and Society* journal of the Institute of Social Research and Forecasting has provided a forum for futures studies. The Futures Studies Centre of the University of Economic Sciences publishes specific forecasts for Hungary in its series called *Futures Studies*, while the series called *Futures Theories* contains the latest theoretical-methodological results of futures studies. The review called *Planetary Consciousness* promotes futures studies on the whole.

Conferences on futures studies can boast a long-standing tradition in Hungary. The *1st Hungarian Futures Studies Conference* was held in 1972 with the full exclusion of the press and the media. At that stage we wished to probe the role of futures research in the socialist planned economy and its situation in Hungary. *The 2nd Hungarian Futures Studies Conference* (1978), which attracted many participants, dealt with complex visions of the future, prognoses and plans as well as methodological issues. One of the sections of the *3rd Hungarian Futures Studies Conference* in 1985 transcended the turn of the millennium analysing the development expected in Hungary for 2020. The second section focussed on the socio-economic development of the 1980's and the crucial turning points. An independent (third) section at the same conference examined the bases for predicting company strategies. The *4th Futures Studies Conference* was held in 1993, the third decade of futures studies in Hungary. It focussed on the threshold of the 21st century and relied on new points of view to outline the socio-economic development of Hungary in the period following the turn of the

millennium. The 5th Hungarian Futures Studies Conference, held in 1998, looked back over the development of futures studies in Hungary in the past 30 years and displayed the results achieved in the new fields of research. At the scientific conference organised in 2000 on the 175th anniversary of the founding of the Hungarian Academy of Sciences we discussed the past, present and future of futures studies in Hungary together with the results already achieved and the new challenges ahead. The material of the conferences is available in volumes edited in Hungarian.

4. University-level teaching

4.1. The period of proof and acceptance

The teaching of futures studies in higher education in Hungary began simultaneously with the emergence of the discipline, as it was in the very institutions of higher education that we began to cultivate this field of science. In the early days, lecturers and students studied together the theoretical and methodological questions of this new branch of science, applying the method of learning through research. They collected and assessed the methods used in forecasting and forecasts made elsewhere, striving to further develop them and to make up new forecasts themselves. Teaching later benefited from the contents of different theses and papers as well as from the results of research carried out for practical institutions.

The teaching of knowledge related to futures studies, primarily economic prognostics, began to appear sporadically in the mid-1960s and to be taught from the late 1960s at the University of Economic Sciences. The teaching of Futures Research as a discipline began as early as 1968 at the University of Economic Sciences, to be followed by the Budapest Technical University and the Semmelweis University of Medicine in 1972. In 1978, the Janus Pannonius University of Pécs followed suit too.

Integrating the results of research into teaching happened fast not only in the university cradle of futures studies; the lecturers and researchers of other Hungarian universities were also quick to realise the potential and to seize the opportunity this branch of science offered. This discipline was cultivated and taught, on the one hand, by those lecturers and researchers who were interested in the philosophical-theoretical-methodological issues of the future and, on the other hand, by those who were more into "calculating" the future, namely took up an interest in its methods and methodology. This discipline also attracted other people with an interest in certain specific aspects of the future, such as the future of cities, the future of societies, the question of robots and/or humans, and the consequences of environmental pollution.

The introduction of futures studies in the different higher educational institutions was by no means smooth sailing. As fast as the university lecturers and researchers made progress in acquiring, developing and adapting in Hungary the new scientific knowledge and in finding the adequate ways of passing it onto the students, so slow was the institutionalisation of this branch of science in academic circles. In none of the universities did senior decision-makers see it fit to include the discipline of futures studies among the main subjects of the given institution and allocate a sufficient number of teaching periods for it. University lecturers and researchers, therefore, had to take a stand on many an occasion so that the subject would be included and kept permanently in the curriculum. The teaching of this subject never reached a massive scale, which had the positive result that tuition took the form of tutorials and there was time for intellectual exchange.

4.2. The period of busy labour

As a consequence of the welcome growth of futures studies knowledge, teaching and research experience, the educational curriculum of universities in Hungary grew more and more ample in the field of futures studies and branched out in each university in keeping with the profile of the given college. The Technical University of Budapest, beside philosophical

issues, investigated the future of technology, the University of Pécs and the University of Miskolc, which started teaching futures studies in 1987, researched and taught company and business prediction, while the University of Economic Sciences focussed on complex, integrative futures studies.

The university-level teaching of futures studies split into two main branches in the 1980s. One continued to be characterised by the shaping of attitude, the best possible adaptation to the profile of a given university, while the other's principle feature was total immersion in futures studies as a profession. These two branches of teaching bolstered and complemented each other well.

4.3. The period of diversification

The collapse of the old regime posed new challenges for the teaching of futures studies. By the 1990s the proportion of purely theoretical-methodological topics and subjects had universally decreased in teaching, and the processing, analysing and assessing of specific forecasts had gained more and more ground. Information technology became an integral part of teaching futures studies. Teaching practical forecasting emerged relatively late at the university level in Hungary, so the application of the principle of "knowing how to do it" has only recently become one of the strengths of teaching futures studies in higher education in Hungary.

Futures studies spread in education under various names. Since futures studies is most markedly related to the training of economists, most of the subjects specialised in teaching the topics of economic forecasting. Business cycle research, financial forecasting, business forecasting, economic and entrepreneurial forecasting, socio-economic forecasting, etc. grew into independent subjects. At the same time, new subjects emerged (e.g. the future of environmental systems, social forecasting, education) which deal with the special issues of forecasting in spheres outside the economy.

By now, teaching futures studies and forecasting has a consolidated place in the activities of the Budapest University of Economic Sciences and Public Administration, the Budapest University of Technology and Economics, the University of Pécs, the University of Miskolc and, since September 1996, the University of West Hungary (in Sopron) too. The subjects of futures studies usually enter on the gradual level of teaching and appear among the optional subjects. They generally last one term. Teaching usually takes the form of lectures and seminars, with occasional consultations and computer sessions.

In the course of the 1990s more and more university textbooks and teaching materials on futures studies were published in Hungary. The first to appear as a guide on complex problem management was the teaching material of the University of Economic Sciences entitled Futures Research. Other university textbooks in the field of business forecasting were published in co-operation by Pécs, Miskolc and Budapest, and textbooks came out on business cycle research, applied system analysis and information technology too. The series called Futures Studies and Futures Theories, launched at the University of Economic Sciences in the second half of the 1990s, provide standard information on the one hand and develop undergraduates' practical forecasting skills on the other hand.

5. International relations

5.1. The period of proof and acceptance

The international relations of futures research in Hungary developed relatively fast. First, we became familiar with the work of the futures research and forecasting workshops of the socialist countries (particularly of Poland, Czechoslovakia, Bulgaria and the Soviet Union) within the framework of bilateral co-operation. Then, our contacts widened and became multilateral primarily due to our active participation in forecasting summer seminars and

forecasting summer courses organised within the framework of COMECON for young scientists.

Already from the 1970s we participated also in the world conferences of the World Futures Studies Federation (e.g. in Rome 1973), first as fellows, but soon with papers.

5.2. The period of busy labour

In the 1980s we relied on the COMECON forum too to enlighten the planning-oriented attitude of the socialist countries and to promote a long-range, forecasting way of thinking. *Géza Kovács* was the chairman of the COMECON-backed Prognostic Working Groups of the Committee on Scientific and Technological Co-operation for six years and of the COMECON's Prognostic Working Group for three years. As specialists, *Éva Hideg, Mrs. Mosoni Judit Fried and Erzsébet Nováky* also participated in the methodological work. *Erzsébet Nováky* was the COMECON's representative in Hungary for 10 years in the field of environmental forecasting.

In those years we participated in every world conferences of the World Futures Studies Federation (Stockholm 1982, Costa Rica 1984, Hawaii 1986, Beijing 1988) and at the most summer universities organised in Dubrovnik mostly as lecturers.

In the 1980s we opened up, mainly through the Futures Research Committee of the Hungarian Academy of Sciences, towards the prominent world centres of futures studies, particularly towards the World Futures Studies Federation. This world organisation held its *European Regional Experts' Conference* in Hungary in 1987 under the title of "The Technology of the Future and Its Social Implications", which mobilised futures studies experts and people interested in futures from far and wide in Hungary. The conference highlighted that technical and social development mutually determined each other. Technological development offers alternatives for society, and the latter will then decide which among the possible alternatives it will enlist in the service of social development.

5.3. The period of diversification

After the collapse of the old regime the international relations of futures studies in Hungary became unfortunately looser with the universities and research institutes of the former socialist countries, and at the same time strengthened with futures studies institutes and university departments in Western Europe (Italy, Finland, Austria and Germany) and the United States (Buffalo, Houston and Honolulu). Ties grew stronger with international futures studies organisations, particularly with the World Futures Studies Federation (WFSF) and the World Futures Society (WFS). We managed to establish personal, friendly ties with internationally renowned futures researchers (such as *Magda McHale, Eleonora Masini, Jim Dator, Pentti Malaska, Tony Stevenson and Rick Slaughter*). This was made possible by our study trips to several countries and international workshop discussions of the educational programmes of futures studies as a subject in a curriculum.

We held the WFSF's XI *World Futures Studies Conference* entitled "Linking Present Decisions to Long-Range Visions" in Budapest in 1990 following Professor József Bognár's proposal. The participants of the world conference stressed that there should be closer links between long-range visions and decisions taken in the present in order for our actions to be more authentic, more well-founded and more future-oriented at the same time.

Part of the success of organising this world conference lay in the previous fruitful activity of Hungarian futures researchers within the WFSF. *Mária Kalas-Kőszegi* was a member of the Executive Board of the World Federation between 1986-1997, and *Erzsébet Gidai* was the Secretary of the European Liaison of the World Federation between 1987 and 1992. More and more of us (e.g. *Éva Hideg, Tamás Gáspár*) have since joined the work of the WFSF. *Erzsébet Nováky* has been a member of the Executive Board since 1997.

It has become more and more evident in the course of our regular and active participation with papers and by chairing section meetings at world conferences of the WFSF (Barcelona 1971, Turku 1993, Brisbane 1997, Bacolod 1999) and through the international exchange of experience that the futures studies activity going on in Hungary has come up with results praiseworthy even by international standards. This has gained expression, among other things, in the fact that the WFSF has asked *Erzsébet Nováky* and her co-workers from the department to organise and manage the biennial *Budapest Futures Course*. The first summer university (meant to replace the futures studies courses of the summer university of Dubrovnik), in cooperation with young colleagues and assistants successfully held in 1999, focussed on the future orientation of young people. It relied on comparative analyses to show the differences in future orientation in various countries together with their elements. The participants stressed the determining role of values in future orientation, which is why the Budapest Futures Course 2001 to be held in Budapest in August 2001 will channel the flow of discussion towards the connection between changing values and forming new societies.

It is welcome news that Hungary already has an honorary doctor of futures studies in the person of *Eleonora Barbieri Masini*, professor of the Rome Pontifical Gregorian University and the former President of the WFSF, upon whom the Budapest University of Economic Sciences conferred this honour in March 1998. Her lecture on "The Role of Futures Studies in the Global Society" was followed with avid interest in the audience.

6. Conclusions for the future

In keeping with the logical structure of this paper, our conclusions are related to the scientific research, teaching, the practical sphere and international relations of futures studies.

As Hungarian futures studies wishes to continue to take an active part in further developing futures studies as a discipline, we wish to devote particular attention to the research of new paradigms in futures studies; to elaborating forecasting methodologies in accordance with the paradigms describing chaotic conditions; and to the development of methods accompanying these.

The thorough study of the information society and preparing our society to receive it are cardinal goals. Our task is to reinforce society's sensitivity towards what is new and to discover the changed role of technology foresight.

We are searching for the new ways and forms of expression as to how the individual and society relate to the future, placing emphasis on researching the future orientation of Hungarian society according to new points of view and examining the connection between non-conscious and conscious attitudes to the future. On the level of society, it is well worth studying the process of pluralisation of people's way of thinking about the future.

The further development (broadening and deepening) of teaching futures studies is desirable. The scientific deepening of the contents of futures studies subjects and the constant widening of the topics included in futures studies programmes with a view to international equivalence is an ongoing task of adapting to the changing circumstances. We can identify as a goal spreading the teaching of futures studies from university to college level, with particular attention to teacher training, and taking it even one step further, to secondary school education too.

Developing and applying new methods seem necessary in order to increase student participation and interest. In the course of this, the widespread application of futures workshop techniques is just as topical as the more integral use of computer modelling and multimedia solutions in education on the whole.

It is a topical and future-oriented task to achieve that futures studies grow into a "profession", in other words, that futures studies be acknowledged in Hungary as an independent profession on the basis of an adequate structure of knowledge and skills. Amid Hungarian university conditions, this is based on the precondition that there be a stronger link

between futures studies and the other subjects taught at the different universities, that future thinking be an integral part of teaching at all universities.

We consider it important that an ever-growing circle of undergraduates become familiar with the basics of futures studies as an obligatory subject so as to constitute a source of apt students who can subsequently be trained for the creative cultivation of futures studies. There should be an independent futures studies Ph.D. programme in Hungary as soon as possible.

Making long-range, medium-range and short-range attitudes more compact is a precondition to renewing the practice of forecasting in Hungary. Futures studies must undertake an ever greater role in reinforcing the strategic attitude.

We strive to provide as multilateral answers as possible to questions raised by Hungarian reality which affect the future. With a view to this, it is advisable for the universities to maintain closer ties with the regional units of forecasting, with consulting companies and the business sphere.

We consider our co-operation with the former socialist countries in the field of research and education an excellent basis for the development of international relations. Beside bilateral relations comprehensive co-operation involving several countries ought to be developed too. Credit-based education may hold great potential.

Ties with the World Futures Studies Federation ought to be strengthened too, for which modern Internet technology can provide an adequate background.

In order for the goals ahead of us to materialise, the young people who belong to the generation of change must be granted an increasing role. Co-operation with young people provides an excellent ground for the research of new problems, for the elaboration and application of new research methods, and may pave the way for the renewal of futures studies in the next 30 years.

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30 YEARS OF FUTURES STUDIES IN POLAND: Experiences and Conclusions

Andrzej Karpinski

Professional futures studies in Poland were initiated in 1969. First projects of this type were created by the institutes and committees of the Polish Academy of Sciences and at a few universities. Initially the University of Wroclaw was the leader in these studies, while currently the University of Lodz is the leader. Before 1989, the year of the breakthrough associated with Poland's entrance on the road of market economy, some achievements in this area were accomplished also by some of the democratic opposition groups at that time, such as the group "Experience and future".

Government agencies began the activities in this field much later. Currently the main role among them is played by the Governmental Centre for Strategic Studies.

1. From classic prognoses to strategic studies on the future

This study is limited mainly to the presentation of the situation in futures studies conducted by the Polish Academy of Sciences. These studies began with the foundation of the Futures Studies Committee "Poland 2000" in 1969. The Committee has been working unceasingly for over 30 years now, including nowadays. However, after 1989 fundamental changes took place in the approach to these studies and the methodologies used in them.

The direction of these changes may be characterised best if one confronts them with the main world currents in these studies. For on the world scale today one may distinguish three main trends in the thinking about the future.

The first one may be called: "the current of global visions". For it seeks the answer to the question: what will the world or the particular aspects of the economy or society look like in 10, 15, or 25 years ahead, i.e. it seeks to determine the vision of the future. This trend of studies is represented by such researchers as: Bell, Kahn, Wiener, Naisbitt, the Tofflers, and many others.

Those who represent this trend use mainly the typical methods of making prognoses with a broad use of econometric methods and mathematical models. In some prognoses of this type there are also some elements of normative character, i.e. attempts at answering not only the question what will the future look like, but also what should it look like.

The second current of these studies is worst-case scenarios or warning prognoses. Examples of this trend are the works of the Club of Rome or the subsequent reports signed by the Meadows. The methodology, similarly as in the former case, is classic, routine methods of making prognoses.

In contrast to the prognoses of the first trend, the more the projections of the warning prognosis are avoided, i.e. the more the reality favourably departs from these prognoses, the better it is.

The third current of futures studies may be called "adapting-preparative". It was developed most extensively and consistently by the Japanese⁸. In this trend the main function of futures studies is seen not in the answer to the question what will the future be like, but how to act in order to prepare oneself for this future in the best possible way and in its various possible options. Hence the key role in this trend is played by the works on the formulation of a long-term strategy of development, which reaches far into the future. To this end it uses mainly the methods of system analysis and a scenario approach.

In the light of the three main currents of futures studies in the world, as described above, the works conducted in this field before 1989 at the Polish Academy of Sciences *were closest* to the first one. For they were dominated by the attempts to answer the question what will the future be like. This trend had a number of important achievements in Poland, concerning both

the methodology and the subject matter, particularly in the area of social studies, which during that period dominated the works of the Committee of the Polish Academy of Sciences. One of the important examples is Poland's contribution in the area of prognoses concerning education and the role of Prof. *Bogdan Suchodolski*, who for many years has actively worked also in the World Futures Studies Federation (WFSF), to mention the least.

The top achievement of this period is the development of the prognosis "Polish society on the brink of the 20th century and the 21st century" in 1982. Many predictions included in that work turned out to be valid.

However, at the same time this trend experienced many failures in predicting the future, both in Poland and in the world. In particular it was not able to predict the fundamental changes in the political system of the world, following the fall of the Soviet Union. Today this is the main subject and direction of criticism of this trend. In Poland this criticism was joined by additional criticism after 1989, which was a result of reaction against central planning, dominating in the former system. This was expressed in the press in a wave of total criticism of the failures of predictions of this type. It questioned the scientific justification and the sense of prognoses of this type. As an example one may mention a number of articles published in the press of mass circulation, with self-evident titles such as, for example, in "Polityka" - "The poverty of prognoses" and subsequently - "A prognosis cut short" or in "Rzeczpospolita" - "Under the charm of false prophets". In the effect of this criticism the concept of futurology took up pejorative features. Today this still affects public opinion on that matter, despite the complete change of futures studies methodology, which took place after 1989.

The main change which occurred during the decade of 1990-2000 was the shift from making prognosis according to the first model of the three described above, to the third one, i.e. from classic prognoses to strategic studies on the future of the new type. They answer completely different questions than the prognoses of the classic type. In the futures studies conducted by the Polish Academy of Sciences today this trend is definitely a dominating one.

The shift to the domination of strategic studies on that subject took place in a few stages.

In the first stage after the breakthrough of 1989 the activities of the Committee until 1995 were dominated by the striving to justify in general the need to think about the future, which in this period, as mentioned above, was questioned. The Futures Studies Committee devoted its main publications during this period to this subject¹³. The work of Prof. Józef Pajestka¹⁴, who became the main advocate of the need to think about the future, although in different forms than before 1989, was of particular importance here.

The second stage began in 1995 with the publishing of the first Polish comprehensive concept of a long-term strategy, encompassing the period until the year 2010¹⁵. For the conditions of the time this was a pioneer work. The priority for education and human investment proposed in the strategy, was not adopted by the subsequent governments. However, the concept played an important opinion-making role. This postulate received a growing support over the following years, although it was not practically implemented until the end of the century.

Finally, *the third stage* began with the publishing in 2000 a more advanced new version of the long-term strategy for Poland, with its horizon extended until the year 2020¹⁶. This concept is essentially more mature with regard to methodology and clearly represents the third of the trends in futures studies as distinguished before.

The specifics of this strategy as compared to the traditional prognoses is delineated by its four main features.

The first one is making the starting point a different research question than in traditional prognoses. For it answers not the question what will the future look like, but the question how to act, what to do, in order to prepare the economy and the society to various possibilities of

development in the future. All observations as to how will Poland look like in 2020 are only a derivative of the answer to the mentioned above fundamental question how to act. According to this, for example, it is of greater importance to determine the manner of modernisation of a given industry with regard to its adaptation to the needs of the future than to precisely predict how much will the given industry produce in the final year of the period encompassed by the prognosis.

The second feature is placing the main emphasis of the strategy not on the year that ends the period encompassed by its horizon, i.e. in this case - the year 2020, but on the identification of roads of reaching that target year, and hence the answer to the question what to do today in order to reach a specific target level. The problems to solve, which are necessary to reach that target, are defined in a more precise manner in the case of the first decade of this period (2001-2010), while only approximately for the second decade (2010-2020). What is particularly emphasised is the definition of the way to put the development process in motion already in the beginning period of the two decades, i.e. in 2001-2005, in order to reach the targets in 2020.

The third specific feature of this strategy is expressed in adopting as the basis various scenarios of possible development of the situation, while in the prognoses of traditional type the aim was usually to determine a one-dimensional picture and shape of the future in the target year. Each of the adopted scenarios has adequate variants of the strategy.

The fourth feature is using mainly the method of system analysis. This means giving attention only to those elements of the economy, which may dynamise the whole system. Hence they are of strategic importance in the implementation of the central objective. Contrary to that, traditional prognoses tended to include the economy as a whole or its large part in the prognosis.

2. Polish approach to some methodological problems

A broader discussion of the content of the strategy presented by the Committee exceeds the framework of this article. It would be impractical even more so, considering the fact that its English version has been published¹⁷.

However it is worthwhile to turn our attention to a few original methodological solutions, which lie at its basis. They concern mainly seven matters, namely: 1) diagnosis of the starting point, 2) scenarios and the ways of determining variants, 3) manners of formulating priorities, 4) key role given to the changes in the macro-structure of the economy, 5) manner of checking the degree to which the adopted premises are feasible, 6) manner of determining the investment priorities, and 7) implementation calendar. These matters are presented below.

- 1. One of the most difficult methodological problems in futures studies is to maintain the right proportions between the work devoted to the diagnosis of the existing state, and the work concerning the problems of the future. It is obvious that the diagnosis of the starting point must determine both the strategy goals and the manner of its implementation. However, an excessive concentration of attention on this diagnosis may weaken the attention devoted to the future. For it is easier to evaluate the existing state than to solve the problems of the future. Such tendencies of escaping into diagnosis occurred also in the Polish practice in the past. In order to avoid this danger and to direct as much of the analytical efforts as possible to the future, in the Polish practice a decision was made to separate the work on diagnosis into a distinct phase. Hence the results of this phase are not directly included in the synthesis of this strategy.
- 2. In turn, in the diagnosis of the conditions of future development, an original manner of classification of the particular predictions was used, which distinguishes four groups of predictions. From that point of view, there are predictions, which may be considered to be: a) certain, b) probable to the degree that they should be taken into account, c) possible, but not yet needed to include in the strategy, d) so difficult to recognise that they must be considered

to be unknown. Of course such division of the evaluation of predictions does not replace the normally used SWOT method, i.e. the evaluation of strengths, weaknesses, opportunities, and threats, but it supplements it. Both external and internal factors are subject to such classification.

In the recognition of conditions of the future much attention is devoted to the recognition of the consequences of demographic processes and the repayment of foreign debt. In turn, in the evaluation of the investment possibilities much attention is devoted to the recognition of the degree of economy's involvement in investments already begun and the evaluation of expenditure necessary for their completion. For only after taking that into account one may define the area of freedom of choice in investment and of the undertaking of new investments.

3. In the Polish practice the choice of the central goal is not the subject of variants, but the variants concern the conditions and the ways of reaching that goal. In the current strategy two scenarios of the development of situation were adopted, which have two corresponding implementation variants, specified precisely in numbers resulting from macroeconomic calculations for the period 2001-2020.

Variant I assumes less favourable external conditions and lesser possibilities of entering more radical structural changes. Variant II is adapted to more advantageous external conditions and greater chances for accomplishing deeper structural changes. As a result, variant I assumes the growth rate of the total production at close to 4.5%, while variant II - at about 6% annually.

4. The choice of main priorities plays a key role in futures studies striving to define the strategy for action. These priorities result from the adopted central aim and the partial goals resulting from the imperative goal. Priorities determine the hierarchy of importance of the specific tasks and the order of implementation of the particular actions. In the strategy for Poland, discussed here, three main directions for action in the initial period, necessary to dynamise the economy, were considered to be the following: educational offensive, breakthrough in residential construction, and increased spending on science and research.

From this point of view, the concentration of the intensification of financial effort, necessary to reach these goals, in three subsequent waves of one-year periods between 2001-2003, is characteristic. This should give the economy strong stimuli for development. It reminds the solutions used during the post-war Germany in the form of the so-called "Bildungswelle, Wohnungswelle, Autobahnwelle".

An integral element of a thus understood strategy is also the identification of the preferential area of the state's economic policy, i.e. fields, which - in the authors' opinion - require particular promotion and support by the state during this period both in industry as well in science.

In those fields state should facilitate fast development with support and aid to the extent approved by the EU legislation. This is information, which is important to foreign investors. It allows maintaining a conscious innovative policy through the association and co-ordination of industrial policy based on structural preferences with the policy of development of science and technical progress.

When determining the priorities, equal attention was given to the avoidance of the danger of an excessive diffusion of these priorities into too many goals and a too large area of economy, because then they lose their sense and effectiveness. That is why, to follow the world literature, the authors warned for the area encompassed by the priorities not to exceed 10% of the economy as a whole.

5. In Polish practice much attention is focused on the changes in the structure of economy and society. The acceleration of these changes is considered to be an important factor for the dynamisation of the development of the economy. Hence much attention was devoted to the identification of those fields, which are able to accomplish that. This is the purpose for the

identification of those branches of economy, which in the predictable future are characterised by a strong tendency for development. In the discussed strategy, on the basis of world prognoses, five branches of economy were selected. These branches - due to the high dynamics of demand for their products and services observed in them - may play a fundamental role in the dynamisation of the economy, mainly in the period at least until 2010, but also later. They include: 1) business services, 2) high technology industries, particularly those associated with information technology (IT) and biotechnology, 3) production and services associated with use of the leisure time, which will be increasing in a recognisable way along with the automatisation and robotisation of production, 4) products and services associated with health care and the prolonged active period of human life, which is a particularly current issue due to the ageing of the population, 5) natural environment protection and its shaping. The support of the process of moving economy resources from declining branches and of decreasing importance to those five areas may significantly contribute to the dynamisation of development of the economy. It is estimated that creating conditions for transferring by the year 2010 from 0.8 to 1 million people presently working in non-developmental industries to those five areas may accelerate the annual growth rate of the economy after 2010 by 1-1.5 points. This is also why much attention was devoted to the delimitation of boundaries of two sectors which compose the dual character of economy in Poland, namely the sector representing advanced technologies and the traditional sector. The first one includes: high technology industries, firms with foreign capital participation, enterprises with strong export orientation, in which exports constitute at least 30% of production, telecommunications, science, and universities. Particular attention in the presented strategy is focused on that sector.

6. When making investment choices, in the Polish practice there are areas or complexes, which are considered to be constant priorities and are distinguished from those, which are considered to be changeable priorities of economic policy. The former include those investments, which are necessary regardless of the GDP variant, since they determine the functioning or the safety of the society. They include comprehensive investments in the following areas: food and agriculture, health care, environment protection, transportation infrastructure, power safety and state defence. The second group includes those areas of investments, which are the result of choice and may change considerably depending on the assumed strategic priorities.

Among the latter, the first places include the need to undertake significant investments for the development of information technologies sector. It has been estimated that in this field the necessary growth of investment will be the greatest, because from 7 to 10 times between 2000 and 2020, at the expected growth of the investment as a whole at 3-4 times. The investment expenditure on that purpose should increase from 7% of total investments in 2000 to 15% in 2020. During the entire two-decade period they are estimated to be above \$180-200 billion, which will constitute their largest position. This is a kind of an investment price for the country's entrance to the era of information society.

7. In the Polish practice when formulating a long-term strategy much attention is devoted to the macro-economic equilibrium. For this determines the feasibility of the adopted strategy. Particular attention from this point of view is paid to five areas, in which the disruptions of macroeconomic balance occur the most often. They include price level, unemployment level, budget deficit, trade deficit, and the payment deficit of foreign trade. With regard to each of those areas a border level is determined, the exceeding of which should result in state intervention.

From the point of view of the feasibility of the adopted strategy it is also important to assume that each solution or action proposed in it, which requires spending from the state budget or the system of public finances, must be balanced in its total amount with regard to

the expected GDP and the budget. This constitutes a certain test, which allows eliminating those proposals, which may turn out unattainable.

8. An important methodological element of the discussed strategy is the identification of diverse priorities in the subsequent phases of its implementation, appropriate to the changes of conditions. Such distribution of these priorities over time results in a certain calendar of implementation, which determines the order of solving the particular problems over time. At the same time it makes the adopted long-term economic policy more apparent. In a particular specific case in Poland until 2005 the main priority is to be the initiation of activities dynamising economic growth, which is necessary for the prevention of unemployment growth. In the years 2006-2008 the main priority will be the repayment of the foreign debt, which at that time will reach its peak amount, while in the years 2009-2015 - the main wave of infrastructure investments should take place and a deep modernisation of the economic structure should be intensified. In a turn in the years 2016-2020 the main goal should be a stimulation of an accelerated movement of population from rural areas to the cities. This may remind of a timetable divided into phases and deadlines.

3. Scale of risks and threats to the adopted long-term strategy

In the work on a long-term strategy the assessment of risk and threats, which may take place during its implementation, is always a difficult and very important problem. This is particularly true in the case of threats, which result from the conditions of the global environment and the situation of the world market. The first to mention here would be the risk of a global crisis, which could undermine the conditions for development of the modern world for a longer time. In the Polish practice it has been considered impractical to develop a separate scenario, which assumes such a crisis, although such possibility is today believed to be more real than 10 or 20 years ago¹⁸. The main argument in this case is that fighting such a crisis requires completely different means that those, which are used to promote the development processes, and therefore this would require a completely different study.

When it comes to internal threats, both social and economic ones, the Polish practice considers the development of a separate worst case scenario, and not a separate variant of the present strategy assuming such threats, to be the best solution. The purpose of such a warning prognosis is the answer to the question what dangers might occur with regard to the specific and already adopted strategy, which is more useful in practice. It has also been decided that the concept of a long-term strategy and the warning prognosis adapted to it should both be examined together and treated as two elements on one entity. Such a warning prognosis is the subject of the Committee's work in 2001.

The preliminary phase of discussion on the proposed strategy indicates that the threats to the strategy may take place mainly in the social area or within the specific economic processes, but to a lesser degree will concern external factors (if the global crisis does not take place). Among the social dangers three issues are the source of the greatest anxiety.

The first one is the ability of the existing institutions to undertake tasks, which actually require deep innovative activities. Bad work of many sections of state administration, weakened too much during the past decade, may not be up to the quality requirements of the presented strategy. This may become the greatest threat to the implementation of this strategy. At the same time, the implementation of the presented strategy requires deep changes in functions, competencies, and the organisational structure of state agencies. From this point of view the need to determine the position of the Ministry of Finances, different from the present one, becomes important. Until now, the work of this ministry was completely dominated by short-term criteria, which resulted from the cycle of planning yearly state budgets. Without changing the position of this ministry and extending the horizon for the shaping of the state's finances, a long-term strategy would have small chances for implementation.

The second threat is the uncertainty whether the decisions to be made by the state, the extent of which was seriously limited through privatisation and the operations of foreign corporations, will suffice to start the development process. For a large number of decisions was overtaken by the foreign capital and moved abroad. Of course, in this situation the implementation of the presented strategy would be impossible without cooperation with the foreign decision-making centres.

The third social threat results from the very critical assessment of the current innovative and initiative ability of the some part of the society. Sudden changes in modern technologies and radical processes of system transformation, too abrupt for the endurance of a single generation, result in the fact that among some parts of the society there occurs a phenomenon of psychological passivity and an aversion or even inability to undertake more active tasks. This may become a great threat if no means are taken on to change the situation in this area and to stimulate the initiative and innovative positions of the society.

Among economic threats, the most crucial with regard to results could be the inability to increase the domestic savings, without which it would be difficult to undertake the investments necessary for the future, without the danger of disrupting the balance of payments or even a monetary crisis.

4. Government long-term strategies - similarities and differences

As stated in the beginning of this article, the concept of strategy presented by the Polish Academy of Sciences is the expression of the opinions of the scientific community represented by the Polish Academy of Sciences Committee. However, it does not have any executive power, which may be activated through constitutional rights of the government and the parliament.

That is why, from this point of view, it is necessary to present the similarities and the differences between the suggested strategy of the Polish Academy of Sciences and the government concept of a long-term strategy¹⁹. The first elaborate government's document on this subject was published in May 2000, hence relatively late. Indirectly this indicates that in the past the interest in such a strategy was not great. This results partially from the fact that under the conditions of the 4-year parliamentary life cycle the main interests move onto short-term problems, for which the particular parties are politically responsible. This is not a good situation and it does not contribute to make the horizon of economic decisions longer.

The main differences between the strategy postulated by the scientific community and the strategy of the government might be expressed in 3 points. First, the strategy developed by the government is closer to the first current in futures studies, described in the beginning, which is purely prognostic. It even contains some normative elements, i.e. it attempts to answer not only to the question how Poland in 2025 will look like, but even how it should look like.

Secondly, the character closer to prognosis results in the fact that the government strategy does not distinguish most important priorities and does not attempt their quantification, i.e. quantitative or qualitative account. At the same time the government strategy is not delineating the area of preference in the country's economy as the proposal of the Polish Academy of Sciences does.

Thirdly, the assumptions of the government strategy aim at encompassing a much larger area, much closer to the area of the economy as a whole, while the strategy of the Polish Academy of Sciences concerns only selected problems and the areas associated with them, which may dynamise the economy. This is most visible in the case of devoted much greater attention to the situation in the fields of declining importance which cause difficult social problems, disappearing or sensitive to foreign competition, than to the promotion of development industries, to which the future belongs. It would be a result of the fact, that fields, which in the world literature are considered to be declining, constitute a much larger share of the total economy in Poland than it is the case in developed countries.

By and large the strategy of the government and the proposals of the scientific community are two different works based on different methodological assumptions. This is an advantageous phenomenon, since it increases the scale of choice and creates a perspective for a broader look at the problems of the future.

5. Substantial elements of the accomplishments of the Polish practice

When analysing the experiences of the Futures Studies Committee of the Polish Academy of Sciences during the over 30 years of its existence, one may recognise some processes and methods, which may be considered a substantial accomplishment, worthy of continuation in the future. For the adopted methods and assumptions proved themselves in these areas in practice.

Particularly seven of them may be considered to be accomplishments. The first one to list is the cross-disciplinary character, i.e. approaching matters and issues from various points of view and from the perspective of various scientific disciplines. This not only enriches the assessments, but also leads to the uncovering of aspects not revealed when approached by a single discipline. Such approach also prevents the tendencies of excessive specialisation and closing the particular disciplines within their own issues. The composition of the Committee also serves that purpose, since the Committee includes scientists of various specialisations (philosophers, engineers, lawyers, historians, sociologists, economists, and ecologists). For some time, the members of the Committee included internationally acclaimed Polish writers and journalists such as, for example, Stanislaw Lem - the science-fiction writer, or Ryszard Kapuscinski. It is also for that reason that people completely unrelated to the given discipline are invited to participate in the Committee's discussions. This formula proved to be right considering the objective tendency of growth of importance of the interdisciplinary forms of science. This direction was later confirmed by the international experiences. Multisided approach also favoured the principle of selecting people representing various worldview orientations and political beliefs, full freedom of expressing different, often even opposing opinions. Such type of thinking, however, does not accept any limits.

The second element of solid accomplishment is the fact of examining the problems of Poland always against the world background. Consistently observing this rule resulted in the development in the Committee's works of the subject matter of world mega-trends and their effect on the situation in Poland. Such approach provided most of all with the possibility of objective assessments and the avoidance of one-sidedness. This approach was later confirmed by the international experience, which found expression in the well-known formula: "think globally, act locally".

The third element is alternative thinking. It is not limited to the analysis of the existing forms or forms known from other countries. It continuously seeks the answer to the question whether there are any other ways leading to the same or an even better final result. Because of this the Committee was sometimes accused of too critical approach but it provided positive effects. For even if some solution functions effectively, one should think about the alternative ways of its replacement in the case when it would stop providing good results. It is important not to undertake the work in that direction too late and to have an alternative solution in reserve. For the most important and at the same time the most difficult is always finding a new idea for organising the reality.

The fourth solid element is the holistic, comprehensive approach. The Committee aimed at the most complex syntheses, at large syntheses, although often based on working hypotheses. Hence the Committee aimed at the integration of problems of the society, politics, culture, and economy, and the analysis of mutual relations between them.

The fifth solid element is the priority for the humanistic, social aspects of the development process. This protected from technocratic threats, quite effectively in fact, and from the excessive "economism". On the one hand the studies on systems of values as well as

education, culture and cultural heritage should be mentioned and on the other hand on the phenomenon of social pathology (delinquency, alcoholism, corruption) are worth mentioning.

The sixth solid element of the Committee's work is the above-mentioned application of the method of system analyses.

Finally, *the seventh element* of the Committee's work is its educational role among the staff conducting similar studies in various areas of economy, society, and culture. The literature published by the Committee raised at least two generations in the expert and scientific communities involved in the futures studies in Poland. On the average the Committee publishes 5-6 books yearly in the area of prognostic literature.

The relations between the Committee and the top-level decision-makers, particularly the parliament and the government, are also worth mentioning. There are still many issues, which are not yet fully resolved and are the subject of mutual criticism.

The government and the top-level decision-makers many times expressed their wish for the Committee's publications to include, apart from diagnosis elements and general strategic concepts, more concrete proposals for solving the analysed problems.

However, this exceeds the abilities of the Committee as a social organisation without a broader executive apparatus. At the same time the Committee often presents opinions, which depart from the proposals of the government in the case of some issues. In turn, the Committee is of the opinion that its publications are not always sufficiently used in the work of the government. This was particularly true in the case of broad expertises and studies. That is why the Committee developed the new form of short, 4-pages-long at most, memoranda addressed to the highest authorities, which present the opinion of the Committee in the most important matters, regardless of the above mentioned full texts of expertises. This form turned out to be more effective, but there is a belief about the still insufficient use of the scientific publications in the activities of the government and the state administration.

However, the Committee believes that its most important role is its opinion-making function, which is its only strength. This is particularly important considering the fact that, as the surveys show, 80% of the readers of the Committee's works are young people below 25 years of age.

The technical and engineering community also addresses postulates to the Committee, which are difficult to meet. Engineers and technicians wish to receive from the Committee more detailed and quantitatively precise prognoses concerning new technologies and products, which is not always possible, or even feasible. The Committee is only partially able to fulfil these postulates²⁰. In the face of enormous changeability of the modern world and abrupt, but not in a form of extrapolation, changes in technology, such detailed forms of making prognoses these days do not give satisfactory results. Nevertheless a close cooperation with the technical community is considered to be an important condition of the effectiveness of the Committee's work.

6. CONCLUSIONS FOR THE FUTURE

One may draw the following most general conclusions from the hitherto consideration.

As the economic and social development of the world becomes more complicated and more difficult to foresee, the need for futures studies based on scientific principles does not decrease but to the contrary - it increases. These studies should be of a more continuous character and based on the monitoring of the phenomena, taking place and on the identifying of new tendencies.

Futures studies should draw from the achievements of economic models as broadly as possible. But the methods of formalised econometric models cannot replace the need to make strategic choices concerning the directions and the main concentration points of efforts and means, what the strategy is based on and what the models alone cannot provide.

The practical effectiveness of strategic long-term strategies for the governments depends on a proper resolution of the problems of competencies and making financial decisions subject to longer criteria than those, which decide during the approach to the yearly budget. Hence the too great position of the financial apparatus may undermine the effectiveness of a long-term strategy.

In order to ease the effects of an excessive concentration of attention on the current matters, as part of the 4-years cycle of the parliamentary life, it is important to seek those problems, which could receive support of various political forces of the country in the longer term and could be implemented regardless of changes in governments of various political orientation.

Most arguments favour the pluralistic approach to futures studies, i.e. conducting them in many centres, since then the results of their work will enrich or verify one another.

Scientific methodology creates particularly favourable conditions for the establishment of such studies of a comprehensive character and not subject to various forms of pressure of economic sectors, regional and local.

The development of new advanced technologies and contemporary principles of functioning of the market economies are growing more and more universal. That means that they are more and more common for different countries regardless of the differences in their social, geopolitical and economic position. It makes the application of the simulation method more and more useful. Hence the role of this method will probably increase in the futures studies of tomorrow.

There is a need for a much broader dissemination of knowledge about futures studies among the youth and in universities.

The processes of integration and of creation international communities such as for example the EU, and the creation of a new information civilization, require a fundamental intensification of futures studies both in the particular countries as well as on the scale of the European Union. For example, the vision of the future of Europe and its place in the world is presently particularly needed.

A fundamental broadening of the international exchange of information about the results of prognoses in the particular countries and the appropriate comparative analyses are necessary.

The use of resources of the European experiences in futures studies and programming, which among others concern the countries of Central and Eastern Europe, may create a strong element of comparative advantage of Europe over other partners on the world market. This chance should be used. The creation of the European Centre for Futures Studies, patterned after the Central European Bank, may favour that.

FORESIGHT STUDIES IN ROMANIA

Mircea Malitza

1. Brief preliminaries

Prospective concerns became manifest in Romania at the end of the sixties and was maintained for some ten years. In 1968 the Chronicle of the Year 2000 first appeared as a press serial and was published as a volume in 1969. In 1973, the futures studies international community met in Bucharest, creating today's WFSF. At the beginning of the 70s the Prospective Commission of the Romanian Academy was set up, which is working even today. In a series under the heading of Global Issues of the Mankind, the Commission has published 15 volumes. In the same period was created the International Center for Futures Studies Methodology with *Mihai Botez* (author of the first Handbook of Prospective Techniques in Romania, and later a known dissident of the regime) as its director. Today, the members of the group are distinguished researchers (World Bank, city planning, science and technology, management, etc.). The Bucharest group maintained close relationships with their colleagues in other countries: Bertrand de Jouvenel, Johan Galtung, Eleonora Masini, Robert Jungk, who often visited them. The problem they faced at home was that of accepting "several possible futures" (de Jouvenel) in contradiction to the uniqueness of aim as according to State socialist planning. In 1977, the Center was expulsed from its headquarters. Meanwhile, it had succeeded to participate in the world perspective movement and in international projects such as that of the Development's Indicators at the UN University.

2. The present situation

After the 1989 Revolution, prospective preoccupations were gradually resumed, and at the end of the 90s they became of topical interest. A summary selective presentation must leave aside a big number of Prospective Clubs that work in cities (*Galati*, etc.), within large professional associations (AGIR) or in schools and universities. I shall only mention the Black Sea University Foundation, the UNESCO Prospective Chair of the Cluj University, the Institute of Economic Forecasting and the Romanian Academy's Commission for Prospective Studies. I shall mention each one's present activities and projects for the future.

2.1. The Black Sea University Foundation (BSUF)

This was created in 1993. Ever since, the BSUF has organized 50 post-university international courses annually that enjoyed each year 1,000 participants (from more than 40 countries). Among the themes of the courses a leading place was held by Prospective (present stage, methods) and prospective studies in various domains. Issues of special interest to our region and to the societies in transition were approached and treated in the light of the prospective (future of the professions, of the universities, of the cities, etc. One general course on Prospective was held by *Hugues de Jouvenel* of Futuribles, Paris. Among the study centers set up by the Foundation, one that distinguished itself is the National Center for Sustainable Development. In collaboration with the Romanian Academy and with the support of the UNDP, it developed the first Strategy for Sustainable Development of Romania, which was supported by Trade Unions and the Employers associations and endorsed by the Cabinet in 1999. The Black Sea University Foundation resumed and developed its ties with UNESCO's prospective thinking centers, the Club of Rome, the WFSF, the WFS etc. It also initiated the editing of a quarterly review, Millennium III. Among the members of the board are Ricardo Diez-Hochleitner, Sergei Kapitza, Lawrence Klein and Ilya Prigogine (Nobel Prize laureates), Federico Mayor, Jean d'Ormesson, Ernst Ulrich Weizsäcker, Roseann Runte and Pentti Malaska. Furthermore, the Foundation established ties with the Forward Studies Unit of the EU and consequently Scenarios Europe 2010 was translated into Romanian under the aegis of

Millennium III. was published in April 2000 in view of a large debate to which the authors of the Scenarios were invited to participate.

The Foundation's main aim was to enhance the awareness about foresight in Romania and to stimulate the production of studies capable of supporting the country's sustainable development. The Foundation shall play host to WFSF's World Conference in 2001.

BSUF also devotes its activities to training. Thus, the most recent initiative based on the experience of the *Conflict Prevention Center* that works under the aegis of the Foundation was the creation of the *Five-Seas Academy* (the five seas being the ones that surround the South-East of Europe). Also, it is worth mentioning that out of the eleven member countries of BSEC governmental organization, six are Balkan ones. The area of the Center's concerns is that of the Black Sea and Balkan South-East. In addition, on the Foundation's initiative the Black Sea Universities Network, linking more than 80 universities, was set up.

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2.2. The UNESCO Prospective Chair

Babes-Bolyai University and Black Sea University Foundation of Romania have set up since October 1999 a UNESCO Chair Program for education and research in "social prospective studies, integration of Central and East-European countries in the European Community, regional resource use and labour force employment, and education prospective".

Chaired by Prof. Dr. *Traian Rotariu*, the Program aims to create a center of excellence in prospective studies and to establish a network of institutions involved in long-term futures studies in the Black Sea area and the developed countries.

The Chair was created following a proposal submitted by the BSUF and approved by *Federico Mayor* in 1997. Since 1999 it is hosted by the Cluj-Napoca University, which has a European Studies Department. During its two first years of existence the Chair had not met with a favourable environment at the Academy of Economic Studies from Bucharest where it had been initially located.

The Chair's teaching staff consists of three professors, three lecturers, one reader, three assistants and one researcher. They have a management headquarters equipped with computers, printers and xerox copiers and a library of more than 100 volumes and 300 specialty reviews.

The Chair was represented at the XVI WFSF World Conference at Bacolod, the Philippines, 5-8 December 1999 by Professor *Traian Rotariu*, when it adhered to WFSF.

They started prospective research activities through the projects: "Romanian Teenagers and Axiologic Changes Associated to Globalization and Cultures" and "Romania's Integration into the E.U. Attitudes, Expectations and Fears of the Population".

Other activities planned for the year 2000 included:

Setting up a Social Statistics School (organized by the Chair for Prospective Studies in cooperation with the Sociology Chair and the Chair of Political Sciences, financed by the Foundation for an Open Society) for students of Social Sciences of the 3rd and 4th years, May 3-13, 2000. Learning of Methodological Elements of Prospective Research; Reading by Professor *Tony Stevenson*, WFSF President, May 25, 2000; Round table on the theme of "Prospective: science, atavism or social engineering?" Participants: Professor *Tony Stevenson*, the staff of the Chair, journalists, professors and researchers from Romania, May 24-25, 2000.

International Symposium "South-East European Transition. The Challenge of Integration", November 13-15, 2000.

The Program aims to develop researches in globalisation and the information society; population, education and social change; the consumption prospective; transformations in the production system and the political evolution of democracy in Romania, among others.

Including the following courses of Prospective in the curricula of Master Degree in Sociology: Prospective Demography, Methods and Techniques in Prospective Research "Mass Communication and Cultural Globalisation" October 2000.

Preparing issue number IV, 2000 of "Millennium III" quarterly.

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2.3. Institute for Economic Forecasting

The Institute for Economic Forecasting (IEF) was established in 1990, in order to facilitate policy oriented economic research into the transitional environment and the impact of EU integration process for the Romanian economy. Since then the Institute has become an active center in Romania and its analyses have played a major role in the decision making process at macroeconomic level, in recent years. Institutions such as the National Bank of Romania, branch ministries (Ministry of Finance, Ministry of Industry and Trade, Ministry of Agriculture, Ministry of Research and Technology, Department for European Integration), international organizations (UN, World Bank Mission in Romania), trade unions and entrepreneurs associations are among the domestic beneficiaries of its studies and analyses.

A leading dimension of IEF's work is oriented towards the development of cooperation with regional (Central- and Eastern European CEE), European and world organizations and other institutions. From the very beginning, it established research contacts with academic and research institutions from the UK (LSE, LBS, Heriot-Watt University, Essex University, Leicester University, Imperial College, University of London), France (CEPREMAP, ROSES- University of Paris 1, GRATICE - University of Paris -XII), Austria (Institute for Advanced Studies, Vienna, The Vienna Institute for International Economic Studies, Belgium (Université Libre de Bruxelles, Catholic University of Louvain), Germany (University of Göttingen), the Netherlands (Free University of Amsterdam), Poland (University of Warsaw, University of Gdansk), Hungary (Central European University, Economic University of Budapest, Institute for World Economy, Budapest), the Czech Republic (CERGE - Charles University), Bulgaria (Institute of Economics, Economic University Sofia), Slovenia (University of Ljubljana, Macroeconomic Institute), Israel (Hebrew University of Jerusalem and CINADCO), Canada (University of Toronto, Institute for Policy Analysis), USA (Harvard University, Stanford University, University of Michigan, University of Pennsylvania - WEFA Group), etc.

Now, to mention some of the particular achievements of the IEF:

The development of comprehensive macroeconomic models for the Romanian economy, in the light of future European Union integration. At present, three different macroeconomic models implemented by the Institute are the functional models calibrated for the present Romanian data and used for analysis and forecast activities (RMSM-WB Model, National Bank forecast, the base for scenarios within the Government Strategy for European Integration and Sustainable Growth, Non-Linear Macroeconomic Model).

Sector and specific studies on aspects of industrial development, reform and restructuring, developed jointly with the CEE and EU partners or together with other domestic institutions. Examples of such projects are: the National Program for Accession to the European Union (PHARE program - jointly with Adam Smith Institute London, Romanian Ministry of Finance); Competitiveness evaluation and industrial policies for reform (Ministry of Industry and Trade, ongoing project with Vienna Institute of International Economic Studies, a pilot study intended to be expanded into all other CEE countries).

Impact studies such as labour market analysis, trade and FDI structural evolution, fiscal and monetary policies. Examples of projects include: Labour market policy and sector employment re-allocation, A comparative study for transition economies, jointly implemented with the LSE (London School of Economics); The impact of indirect taxation on the demand of gasoline in Romania, jointly with the Ministry of Finance and the Adam Smith Institute; The Sustainability of Public Debt and Deficits - World Bank Program and CEROPE, etc.

The researchers of the Institute have published more than one hundred articles in international publications as well as contributions to well-established Romanian academic journals, the Institute's bulletins, etc. Also, part of some of the Institute's works were published as chapters in various books edited by prestigious publishing houses such as Kluwer, Springer Verlag, OECD, World Bank, etc.

Particular attention was paid to attracting young promising Romanian researchers and including them in specific training programs, often in top universities and institutions in the European Community and EEC countries, including Romania. Practically, all senior researchers of the Institute have benefited from long spells of training and skill improvement in the EU or candidate countries, in the form of fellowships, scholarships, summer schools of economics, academic bilateral exchanges.

The Institute has also received the visits of numerous senior and junior researchers from EU member countries or other EEC candidate countries, involved in fellowships, post-doctoral studies, participation in joint research workshops, seminars or in conferences organized by the Institute. Also, the Institute organized workshops, seminars and conferences with international participation.

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Publications: *Macroeconomic Analysis and Forecasts* and respectively *Economic Performance Evolution in Transitional Systems*, Institute for Economic Forecasting, Internet Securities Inc., ISI Emerging Markets)

2.4. Commission of Prospective Studies of the Romanian Academy

The 25 members of the Commission, members of the Romanian Academy, are directors of research institutes and experts in the discipline of Prospective. The Commission collaborates with the Institute for Economic Forecasting of the Romanian Academy, the Governmental Center for Prognosis (moved at present with the Ministry of Finance) and other centers in the country. Its foreign ties are with the Forward Studies Unit of the EU in Brussels, Futuribles in Paris, the UNESCO Analysis and Prospective Center, World Futures Studies Federation in Australia, the Club of Rome and other similar national centers.

During its almost three decades of existence, it has published 15 volumes of studies under the heading "Global Issues of the Mankind". The Commission was in the past years one of the initiators of such works as *Romania 2020, Romania's Strategy for Sustainable Future* and collaborated in writing them and is at present committed in elaborating the development strategy for medium term in a European perspective by the Government's group of experts. It is the initiator of the UNESCO Chair for Prospective at the University of Cluj-Napoca and has supported the Black Sea University's program of prospective studies in close collaboration with BSU. Furthermore, the Commission was patron of the National Center for Sustainable Development and members of it are on the Board of the Center. The Commission is one of the patrons of *Millennium III*, a quarterly published in English. It also has developed synergic ties with the other mentioned above centers.

Its aims are, among others, to stimulate and direct prospective studies in Romania and to elaborate studies on the future development of the Romanian society in the perspective of globalisation and European integration.

Its projects for the years 2000-2001 include the elaboration of a prospective study of education and work in the light of modularization of disciplines and a national symposium on the scientific and technological perspectives opened in Romania by the ICT revolution.

3. Conclusions

The slow rhythm of recovery of prospective studies in Romania is partly due to the heterogeneous political coalitions, which could not make up their mind upon some prospective strategies, which would have required, of course, the support of some foresight studies, but also because of the reservation of the ultra-liberal circles towards the prospective. The resort to developing politically independent research came from the area of the civil society, which, with the support of some international bodies, has produced such studies as Romania 2020 and the Strategy for Sustainable Development. The fact that they have worked together has helped the non-governmental organizations. But most particularly, it was the beginning of negotiations for EU access that was the decisive factor, which has determined the change in the attitude of authorities and their implication in such strategies as require prospective studies. One may state that in the spring of 2000 the elaboration of the mediumterm strategy of Romania with the support of the EU has created a momentum in favour of such studies and brought them to a broad public attention. It is most significant that, together with the development of the strategy to which civil society is called to bring its contribution, there are ongoing talks about creating a permanent governmental body capable of guiding and monitoring long-term development.

The mentioned above bodies have found through their activity the encouraging potential of the civil society. They are to be found among the initiators of the *Romanian Forum for European Integration* that includes some 60 NGOs.

FUTURES STUDIES IN SLOVAKIA

Stefan Zajac

1. Futures studies before 1989

Futures studies in Slovakia²¹, as a part of the former Czechoslovakia, from its very beginning, were linked with economic planning. The term used in Czechoslovakia, was "prognostics", which considered futures studies as the crucial process preceding the formation of a long-term socio-economic outlook. The foundations of socio-economic planning were laid according to the regularities of the advanced scientific-technological progress. Of course, forecasting and planning differed in levels of objectivity and complexity but they were necessarily tied. According to a dialectic-materialist outlook, the future was, in principle, stochastic and not simply a projection of the past. Therefore, planners and researchers in Czechoslovakia were concentrated on the analysis of scientific and technological processes and on their societal consequences (societal progress). This view of the role and objectives of forecasting was shared by the authorities responsible for planning until the end of the socialist regime in Slovakia, although for many years works on global social-economic forecasting were carried on in different research institutes, especially in the Slovak Academy of Sciences.

In the midst of the 1960s, another type of futures studies was launched by the team led by Radovan Richta from the Institute of Philosophy of the Czechoslovak Academy of Sciences. Their investigation resulted in the famous book "Civilisation on the Crossroads", which characterised the post-second war period as the advent age of a scientific and technological revolution, generating a new technical and economic paradigms, as well as a new way of life. The analysis was so convincing that the idea of the scientific and technological revolution, of the transformation of science into a productive factor was generally accepted and even incorporated in official political speeches, and the acceleration of science and technology activities was considered as one of the priority tasks under socialism.

A new phase in the evolution of the futures studies in Slovakia began in the early eighties, namely in 1983, when the government decided to carry out a global social and economic forecast of Czechoslovakia, including Slovakia, up to the year 2010. In Slovakia, it was the SAS, specifically the Institute of Economics as co-ordinator, which was appointed to realise the project. The decision to entrust this task to an academic body followed from the idea of achieving a very global view of the possible ways of development of the socialist society in a longer period of time, where economic indicators and tendencies would be one of the development parameters, themselves influenced by the changing of many social, cultural and demographic factors. But also some political and governmental bodies were designed to be the major consultants, and receptors of the final and partial results of the projects, and were to be regularly informed on the course of investigations. This new type of forecasting, was considered to be part of the planning process as a whole.

The global social and economic forecast of Slovakia was published as a book in 1991 (Markus, J. et al.). Most important conclusions were subsumed under following six points (pp. 162 - 170):

1. At the turn of the 1980s and 1990s, Slovakia again stands at a historical crossroads. Due to internal and external factors and contingencies, further progress forward is not possible without a deep social breakthrough, without a radical restructuring of the society, without its overall qualitative change or transformation. The essential trait not only of the day but of the entire decade and perhaps of decades is not continuity, but discontinuity. This involves a disruption of the evolutionary progression which began dangerously and irreversibly to increase downwards, towards stagnation and decline. In this situation, long-term prognosis has for task to outline the course of two qualitatively divergent developmental roads; they

simultaneously form the framework, the boundaries of Slovakia's possible future development.

To these two roads there correspond two scenarios of a comprehensive prognosis of the Slovakian Republic: their common feature is that both are in a certain sense discontinuous. They can be succinctly characterised as leading upwards and downwards; as a dynamism of ascent, naturally painful, complex, full of problems and antagonism, and as an apparently less risky tactic of small changes; this, however, will lead to an impossibility of maintaining what we may still assume to possess - a relative welfare and an appurtenance to advanced, or relatively advanced countries of the world. These were scenario of the desirable development and warning scenario.

2. One must realise that every change in the developmental line, enforced in the present revolutionary situation by objective circumstances, represents the exacting task of abandoning deeply rooted structures, mechanisms and methods of the so-called extensive stage of industrial development.

In this connection, it may concisely be formulated the "sum" total of the necessity of overcoming of industrialism, its motile logic, and the mechanism of its application in Slovak society. In case of Slovakia's adherence to this logic, it is threatened with the same "fateful" lagging behind that had been characteristic of non-industrialised countries at the time of the first industrial revolution. At the same time, there is no doubt that this lagging, being newly formed, cannot be overcome in the same manner as had been the case with industrialisation (although this overcoming, in terms of its significance, is equivalent to industrialisation as regards the entire society). This mode of overcoming has one unpleasant trait at the present time, viz. that it conserves and deepens backwardness and logging behind.

- 3. New methods for resolving social problems, new modes and means of satisfying social needs will in their entirety create a new quality of the social reproduction process; with a certain measure simplification, this quality may be characterised as informatisation, intellectualisation and individualisation of that process under conditions of a growing internalisation (this last aspect will be dealt with presently).
- 4. In the future, all major global problems of the present and future world will incontestably find their reflection also in our national environment and will demand and initiative response outwards (e.g. in issues of war and peace, but also in the struggle with famine and other problems of the third world), and inwards. When speaking of global problems, mention in made as being their fountainhead of a crisis of culture and ethics, of a sensible weakening of the regulatory strength of universal values and norms, but also of an indispensable renewal of a "rule" of cultural, humane, ethical values if we care that our world as such is to survive.
- 5. It must be stressed that the only way internal problems, particularly scientific-technical, economic, but also cultural ones, Slovakia can be resolved in future, is through a greater opening to the outside world. Every attempt to circumvent this mode of solving our developmental problems will according to our prospective development until 2010 lead to an overall dramatic loss of our even now not too prominent positions in the world, to a considerable relative lagging on an international scale. The need of internationalisation of our social reproduction process and our whole life emerges again, and in a new way at that, a need to learn to live in international and internationalising conditions and connections of development. A successful entry into these connections and conditions is possible uniquely in virtue of our own "face", national identity, utilisation of our national temperament and national culture. Uniquely thus shall we succeed not to enter the international contest and collaboration empty-handed, or with cheap imitations: uniquely on the basic of our own originality, creative searching and finding (including also the element of a ready exploitation of what others have already found) we shall be interesting to the rest of the world, only thus

we shall be able to combine within ourselves ability to compete and readiness to co-operate, willingness to give and to receive values. This penetration outward presupposes a struggle against our inner vices and pseudo-values.

6. What will be Slovakia's further road through history? It may be said, speaking with a little modesty, that our searching and our contribution must start from our knowledge of the historical lane, often no more than a narrow path of our Slovakia through the complexness of the great world. We might speak here of our internal history, of history imprinted in us as of the foundation of our progress into the future and of the source of our contribution enriching others. We did not pass through history lightly or easily, we are not here chance, and our stay must not be in vain: we have our obligations towards ourselves and towards the world. This presumes broad and deep social activities for the protection and renewal of positive values, which we carry along from history, and a struggle for domesticating within the Slovak society of a readiness inwardly to change in the exacting contest and collaboration with the outside world.

As far as science in Slovakia is concerned, results were published as a book in 1990 (Gál, F. et al.). Forecasting activities in science were organised according to principle so called problem situation in science (opportunities and threats). This situation was understood in the scope of discrepancy among actual, anticipated and desirable state of some subject (e.g. scientific discipline, development process, quantity etc.), including conditions and ways of its solutions. Within the problem situation, panel experts (several hundreds of experts) were participating in seeking for scientific potential (personnel, funding, endowment, institution and so on) by means of which such a problem situation could be solved.

2. Futures studies in the 1990s

The 1989 changes interrupted temporarily the long-term forecasting exercises. New development issues arose. The problems of transition from one system to another drove into the background traditional forecasting concepts and forecasting activities themselves. A great number of specialists in this field, among the most competent, entered politics others found better remunerated jobs in private companies. The total number of active forecasters declined rapidly, along with interest in forecasting itself.

An interest in forecasting led in 1990 to the foundation of the Slovak Civic Society for Futurology, promoting the popularisation of main trends of futurologist thought in the world, but also of the results of forecast research in Slovakia. The Association is in contact with the World Federation for Futures Studies and with the Slovak Association of the Club of Rome and the Society for Sustainable Life. Its members take part in the world futurological project, The Millennium Project. Several papers presented at seminars were published in weeklies of large diffusion and in their own publications.

After a short period of time, at the beginning of the 1990s, the need for a long-term strategic view in the frame of which restructuring programs and economic policy could find a sounder base for strategic decision generated a revival of forecasting activities. In 1992, a project entitled "Slovakia - Steps towards European Community - Scenarios of Socio-Political Development, Economic Strategy and the Development of Higher Education and Technology up to the Year 2005". The project was carried out within the framework of a larger international project: "Central and Eastern Europe up to the year 2000". The project was supported by the DG XII of the European Commission, in co-operation with the Institute for Human Sciences, Vienna and Euroreg (Warsaw University) Warsaw, and co-ordinated (in Slovakia) by the Institute of Sociology of the SAS. The results of forecasting exercises were published in 1994 (Faltan, Ľ. et al., 1994), and in the European Union in 1995, respectively (Eastern, 1995).

It may be of great importance to note that the Slovak parliament approved an amendment of the so-called "Competence Act" in March 1995. According to this amendment the "Office

for Strategy of Development of the Society, Science and Technology" was established. This office is the central body of the state administration for the "programming of strategy of development of the society, science and technology and for regional development". This Office had prepared "Vision of the Slovak Republic development up to 2020" (see, R. Tóth, 1998) but it was not accepted by scientific community, at all. In 1999, the Office was abolished.

Against this background, in 1997, an important step was made when the Institute for Forecasting of the SAS succeeded in obtaining a three years grant for the construction of a global socio-economic forecast of Slovakia up to the year 2015. Project was entitled as "Structural Changes in the Decisive Spheres of Slovak Society in Long-term Perspective". During three years of research, a very realistic view of the major tendencies generated by the transition process and the changes of the international context, was achieved and published in theoretical reviews, or submitted to official institutions (Economic Council of the Slovak Government).

On September 2000, Economic Council discussed a new proposal prepared by the Institute for Forecasting. This proposal was aimed at the vision of Slovakia up to 2015. However, Economic Council recommended, due to public procurement rules, that the Slovak government would advertise a call concerning project proposal for such a vision. This year, preparatory activities are underway.

Project scope and its methodology were inspired by foresight exercises carried out in the Czech Republic and Hungary (namely, Hungarian Academy of Sciences). Vision of Slovakia 2015 is understood as a two-dimensional development. On the one hand, there is an international context and its impacts for Slovakia, on the other hand, there are driving forces and outcomes of domestic context. Latest analyses suggest that major problems of Slovakia have emerged in the following fields:

- 1. Geopolitical situation of Slovakia,
- 2. National identity, traditions and societal changes,
- 3. Institutional system and the rule of law,
- 4. Socio-demographic structure and quality of life,
- 5. Development of education and knowledge-base,
- 6. Information technologies and competitiveness of economy,
- 7. Employment and structural changes in economy,
- 8. Environment,
- 9. Regional development.

The general aim of the project is to understand how recent and prospective changes have and will impact on different fields of the Slovak society. In particular, project has aim:

to assess the extent to which there has been shift in individual fields (mentioned above) during the transition process;

to identify key issues for Slovakia in respect of how it develops its policies for catching-up with the European Union;

to produce two scenarios of likely future changes in consequence of the future Slovakia accession.

One way how to disseminate the results and to include the user perspective already during the project will be the installation of a Steering Group consisting first of all of the representatives of the academic sector, government, non-governmental organisations, business interest groups, trade unions etc. This group should meet several times during the term of project. Furthermore, the vision results will be presented at national scientific conferences and in national (may be international) scientific journals. Main findings and conclusions of interim reports as well as that of the final report will be published in press articles.

3. Conference at Smolenice 1998

In late 1997, the Institute for Forecasting of the Slovak Academy of Sciences and its Scientific Council began to assess the past and the future of the Institute's scientific activities. The idea was to carry this out in the form of an international conference on "Forecasting in the Transition Society". This conference was held at Smolenice castle (belonging to the Slovak Academy of Sciences), from November 20 - 21, 1998, with the participation of six experts from six countries in Central and Western Europe and nine participants from Slovakia.

The conference was to provide an international forum for the presentation and debate of current research and scholarship on the methodology of forecasting and practical knowledge of forecasting development in the transition society. The conference aimed at the current problems of forecasting methodology and the questions for the future in societies in transition (first of all, prospects for the catching-up of these societies with the EU nations), as seen by Slovak and foreign scientists and experts. Thus, providing a forum for presentation and debates, surveying research agenda and exchanging experiences in this field were of topical interest in various respects.

Bearing this in mind, and in order to capture the most salient approaches and analyses offered to explain the processes of transition, the conference was organised around four broad issues:

importance of forecasting for the process of transition,

forecasting of economic development,

forecasting of social development,

forecasting of regional development.

Participation at the conference was decidedly multi-disciplinary, encompassing the viewpoints of academics, policy-makers and bankers. Such multi-disciplinarity favoured the examination and broad discussion of the issues from a variety angles. Were the problems resolved or at least explained? The answer would probably be no. This could not really be expected considering the variety and complexity of conditions and circumstances involved.

On the other side, scientific results of the conference may be attributed to the following favourable circumstances:

the support the conference was provided by the Institute for Forecasting and its Scientific Council, under whose auspices it was conducted,

the extraordinarily quick and efficient financial support given the conference by the British Council in Bratislava, and

last, but not least, the interest and involvement shown by researchers, who participated not only in completing their contributions in a very short time, but also by the programme of the conference, which was very instructive, stimulating and interesting for all involved, both in their presentation and remarks and questions to the discussion.

4. CONCLUSIONS

The futures studies in Slovakia during the 1990s could be characterised as follows:

forecasting activities in Slovakia have not been regularly organised due to missing competencies,

however, experience with these activities suggests that government, universities, research institutes (first of all, those from the SAS) and scientific communities should all be encouraged to undertake, or to be involved in, forecasting activities,

such activities could develop a transparent process for decision-making on society, economy, environment allowing to shape the future of Slovakia.

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FUTURES STUDIES IN THE USSR (1966-1991) AND IN RUSSIA (1991-1999)

IGOR BESTUZHEV-LADA

Futures studies in the USSR/Russia leave by roots in *the precocious futurology* of the end 19th and beginning 20th centuries, when some outstanding European, American and Russian scientists - D. Mendeleev, I. Metc.hnikov, K. Ziolkowsky and others in Russia - have acted in their works with reflections about the future. In 20s some books and many articles on this theme were published, including that of V. Bazarov-Rudnev in 1924-28 with a statement of the concept of the problems-goals approach to the future, which is now basis of modern technological forecasting. But it was not to understand for contemporaries, was forgotten for decades and was entered into futures studies literature in 80th only. Since the end of 20s and till the middle of 50s the Stalin's political regime has liquidated all studies in social sciences, including the sphere of the future. There was only imitation of "scientific prediction" in dogmas of "scientific communism".

1. Forecasting Boom in the USSR of 60s

In the middle of 50s the thawing of Krushchev's reforms has resulted in some revival of social sciences and during the first half of 60s some books and articles "about the future in general" were published, but not yet supported with any special studies (I. Lada: If World Disarms, 1961; G. Dobrov and A. Golian-Nicolsky: Century of Great Hopes, 1964; I. Lada and O.Pisarzhevsky: Profiles of the Future, 1965, and others). But such publications were permitted only by way of the comments to the new political program of the Soviet communist party therefore it was necessary to state the forecasts by the language of Esope.

The situation was changed in 1966 only, when the third *perestroyka*, i.e. Kossyguin's liberal reforms, was begun (the first was Lenin's *new economic policy* of 1921-29, and the second - the *thaw* of Krushchev's liberal reforms of 1956-64). During all three *perestroykas* attempts were made to revive an realised utopia of *barracks socialism* by some liberalisation of the political regime, including loosing of repression and censorship. But then the ruling circles curtailed reforms, which threatened their autocracy.

In 1966 on the XXIII Congress of the Soviet communist party was decided to expand the problematic of economic planning by adding of social aspects and resting on "scientific base". Unexpected for ruling circles was reaction to this decision as a movement of scientists and students under slogan of "scientific and technical forecasting", i.e. forecasting in the sphere of science and industries only, not of society in general, no confrontation against "scientific communism" (please, not to confuse with *technological forecasting!*). After three years of fierce ideological struggle with Marxist dogmatics, there was appeared in the USSR by the end of 60s around a thousand (!) of sectors and departments in research institutes, big plants, government establishments, which were engaged in technological forecasting not only in the sphere of science and industries.

Spontaneously there were appeared some non-government associations with own magazines beginning to organise almost annual congresses "on forecasting" with more then a thousand participants everyone. Almost each month in Moscow, Leningrad, Kiev, Novosibirsk and others USSR university centres there passed conferences, symposiums, colloquiums, seminars on this problematic with dozens and hundreds participants everyone. In this movement, according its leaders was involved not less than 4000 active participants (more than 800 in Moscow only) and ten times as much of students and other auditory. Every year left on this problematic up to a dozen books, some dozens articles, some hundreds papers. There was published even an independent non-government (strictly forbidden in the

USSR!) monthly review "Voprosy prognozirovania" ('Problems of Forecasting"): 14 issues before repression.

In 1966-91 there was published in the USSR over 500 of "scientific monographs on forecasting" only, not considering thousands reports on futures studies and publicistications. As a matter of fact it was as much as continuation of *forecasting boom* of 60s in the West, but with the Soviet specificity. Two third of all these departments and publications were that of forecasting in science and engineering (mostly the last), near a quarter - in economics, near one tenth - in sphere of town-planning. Other branches of forecasting - concerning environment and health, sociology and politology, population and culture, psychology and law, space and war, etc. - made shares of one percent everyone. A special cluster of forecasting was that in natural sciences: agro-, hydro-, weather forecasts, in geology and mineralogy, in physics and chemistry, in medicine and biology, in cosmology etc.

Incompatibility in principle of forecasting in general and technological forecasting in particular with anyone authoritarian and the more so totalitarian regime at once was coming to light. At authoritarianism/totalitarianism the statement of any problem includes simultaneously also way of its decision, for which has responsibility an appropriate functionary, who is to be punished if decision has no success. It is clear, that here no problem-forecast is possible. At once a typical Russian/Soviet problem appears: who is guilty and what to do and where authorities look? It is well known that any forecast usually reveals a challenge, on which authorities do not have an appropriate answer and which therefore is perceived as "the anti-Soviet propagation" with immediate repressive reaction. It is clear, that at such perception almost any forecast automatically turned in the category of "secret information" and accordingly was simulated so that not to cause discontent of any authorities.

It is enough to tell, that from mentioned above 500 Soviet books "on forecasting" left in the USSR in 1966-91 almost all were devoted to questions *how* to forecast and only few - *what* is predicted and that in publicise only so that to avoid a question on efficiency of existing regime. We could remind, that one of three or four such books containing not common consideration "on the future", but more or less concrete forecasts, though in very "conformist", "non-problem" phrases (I. Bestuzhev-Lada: The World of Our Tomorrow, 1986) has sustained in several European countries up to ten editions, including two in FRG, two in GDR and on one in the French, Danish, Polish, Bulgarian, and Slovak languages. So great was the interest to "mysterious Soviet Futurology". And in Russian this book has appeared only some years after the numerous foreign publications 1984-85 and publication practically all of its chapters in many Soviet magazines 1982-85.

In fact there was only one way to publish concrete forecasts: to present it under a cap of "criticism on the bourgeois futurology". The mountain of such literature quickly has grown dozens and dozens books out of five hundreds mentioned above, hundreds and hundreds articles. There were two preliminary conditions for such publications: all forecasts were not to compromise the future of the USSR and "socialist camp" on the whole and were to present the agony of capitalism and non-competence of "bourgeois futurologists". These conditions were actual even for books and articles translated into Russian. Therefore a Soviet reader could be familiar with works of Western theorists and methodologists of forecasting could read books about general prospects of mankind, but books with concrete forecasts, especially touching the USSR, were inaccessible to him. Let's tell, works of E. Jantsch, J. Martino, J. Tinbergen, A. Peccei were translated, but that of J. Forrester and Medows did appeared in Russian in 90s only, and G. Kahn's "The Year 2000" and Toffler's "The Future Shock" were published in Russian as top secret documents for top Soviet authorities only.

However such a "mimicry" does not helped to Soviet futurists. Since 1969 Soviet authorities frightened by "The Prague Spring" have begun curtailing the third *perestroyka* and in 1970-71 have smashed once more all social sciences. Hundreds of scientists protesting

against invasion in Czechoslovakia were dismissed, have several forms of defamation with prohibition to publish anything, to make lectures for students or contacts with colleagues in other cities and countries. Some of my colleagues had such kind of "home arrest" up to 20 years - till 1991 (I personally - only one and a half year). The Vice-President of USSR Academy of Sciences Prof. A. Roumiantsev, who "has opened the road" to forecasting, to "concrete social research" (i.e. not dogmatic Marxist), to mathematics in economic research, to sociology and politology strictly forbidden before, - was removed from his post. Some ideological leaders of "technological forecasting movement" (B. Tardov, I. Bestuzhev-Lada and others) did get "home arrest" mentioned above.

2. Quasi-forecasting in 70s - 80s

The USSR has entered in period of stagnation ("zastoy"), has gone through 4th and 5th dead born "perestroykas" (that of Brezhnev in 1979 and of Andropov in 1982) to the 6th of Gorbatchev in 1985-91, brought to crash of political regime, disintegration of the USSR and disappearance of "world socialist system" and at the end to the 7th "perestroyka" of Eltsin in 1991-2000 (in 2000 Eltsin wasretired after two terms of an elected Russian President according Russian Constitution). Already to the beginning of 70s it has become clear for the ruling circles in Kremlin that the USSR has lost arms race, i.e. a matter of fact has lost the Third World War under pseudonym "Cold War". Has lost race with an enemy, who was four times stronger economically and quality stronger technologically. Therefore Kremlin near 20 years - till Gorbatchev capitulation to NATO in 1989 - tried to compensate the technoeconomic weakness by offensive activities in Asia, Africa and Latin America, and to compensate the fictitiousness of "socialist planning" by "scientific grounding".

With this purpose in 1972 there was created some kind of forecasting state service under pseudonym "Complex Program of Scientific-Technical Progress". By 1976 it was developed to a special state system under the USSR Academy of Sciences, ministries of planning and of building ("Gosplan" and "Gosstroy") with more than half-hundred commissions on all branches in its structure: from industries and international relations to education and culture. Each commission was in fact a committee of 30-70 presidents, directors, heads and other top bureaucrats. Each commission member had behind him dozens and hundreds subordinated who did drafts of documents under supervising of a hierarchy of editors-slave-drivers. Thus into system were involved summa summary as much as 20000-30000 quasi-futurists who had no idea about forecasting and especially of technological forecasting. This great army did prepare during first two years of every 5-years planning period ("piatiletka") in 1972-74, 1976-78, 1982-84 and 1986-88 top-secret documents with demands to give more money for appropriate branch on 20 years prospect. It was supposed, that these quasi-forecasts would be developed in Gosplan into 10-years programs and at the end into 5-years plans of a national economic development.

But in fact bureaucrats in *Gosplan* did ignore all quasi-forecasts and elaborate their quasi-programs and quasi-plans "from achieved", i.e. put in their documents only data, which "look good" in politics and propagation. And top bureaucrats at Kremlin in turn did ignore all these quasi-plans accepting secret voluntary decisions quite independently of any forecasts, programs, and plans. So for example according plans the USSR spent (as if!) 20-30 billions roubles for arms race against 200-300 billions dollars in the USA and none the less got the parity of arms. In fact it was 16 cents of each dollar of national income in the USA and 88 kopecks of each rouble in the USSR with doubling the charges on race of arms each five years. It is easy to imagine a real forecast of such a race and to understand why in the USSR all real forecasts were considered as secret documents. And why Soviet futurists were simply frightened to elaborate and to try to publish such forecasts!

Later, in 80s, some departments of the gigantic Central Economic-Mathematical Institute were reorganised as a special Institute of economic forecasting with some hundreds fellows

and a special magazine to summarise non-secret materials of commissions mentioned above. The Institute and all commissions formally exist till nowadays, but what forecasts under past and present conditions? As results there were and are two institutes-twins instead of one before, that's all.

It is necessary to notice that told concerns not only to the USSR. In German Democratic Republic and in Bulgaria since 1968 till 1991 there were state forecasting services much stronger, than in the USSR. They included commissions on forecasting at Politbureau of ruling party and at premier-minister (that it was not possible to make in Moscow, despite of many attempts during 1967-70), departments of forecasting almost in each ministry and in each district, and also at the largest enterprises, chairs of forecasting at many universities etc. Not so total, but similar establishments were also in Poland, Czechoslovakia, Hungary, Romania. And what? They everywhere did "function" as though in themselves, the planning went in itself, and voluntary decision-making - in itself. Anything another under totalitarianism is impossible in principle.

Thus, we see in the USSR in 1966-91 as though three levels of approaches to problems of the future.

On the first, lowermost level we see hundreds departments of various establishments elaborating secret technological forecasts "for confidential using only". According some expert evaluations there were prepared during these 25 years dozens of thousands such forecasts - an ocean of the secret future information. However it is necessary to take into account, that such forecasts were always "corrected" by several instances of the heads, which always were influenced first of all by fear before higher instances and consequently in every possible way did try to avoid any *problematic* and the more so *heuristics*, innovations in a statement. And a forecaster himself usually was guided by the same reasons, so any concrete evaluations and data sunk in habitual (till now) idle talk, froth.

On the second, intermediate level there were discussions of the done work at the working meetings mentioned above. There still it was possible to meet concrete evaluations and data in essences, but they also sank in froth, because many opponents-dogmatic always may be denunciators, and authorities strictly stopped any attempts to take "liberties" with forecasts.

Finally, on the third, top level we see hundreds of books and thousands of papers with the same "how to predict" or with very common evaluations of general perspective of that and that phenomenon.

3. Six case studies - one example of hundreds

We shall refer as an example - one of hundreds possible - to works of the Sector of social forecasting in Institute of Sociology, USSR/Russia Academy of Sciences - a unique body of this profile in this country (periodically such sectors arose in Moscow, Leningrad, Novosibirsk, but all quickly disappeared, because forecasting in sociology, for the clear reasons, is much more risky, than in the sphere of scientific and technical progress, economics or town-planning).

In 1969-91 the sector has fulfilled 6 full-scale futures research projects with some preprints on intermediate reports and with final monograph in Russian on every project (the same title for a project and a appropriate monograph) and with confidential report in Department of science, USSR Communist Party Central Committee on every project.

1. Forecasting in Sociological Research (1969-78). The theory of forecasting of changes in needs of the personality and of the society, in social structure, in structure of time of society (social time), in spatial organisation of life activities of society (social space) is developed, are given key evaluations on each direction of research. But in the monograph, as well as in all subsequent, the censorship has left only most general trends characteristics, as though "by itself understood".

- 2. Forecasting Social Needs of Youth (1969-78). The attempt of interrogation with the purposes of forecasting not of the experts, but of usual respondents is made. The restrictions of such approach and ways of overcoming them are revealed with the help of psychological tests. The youth was chosen as object of research not only because non-trivial estimations were expected, but also because some fellows' rates were paid by Central Committee of Youth Union. However, all rates were stolen by Institute's administration (usual in the USSR) and quite other people did realise the project. The expectations, that the youth could give more non-trivial estimations about future things as the aged people do, has appeared vain because of presentism of common consciousness of people of any age, i.e. likening past and future to the present. Near all concrete forecasts and even simple youth estimations about the future have not got in the monograph, have sunk in archives of the Youth Union.
- 3. Social Indicators of the Soviet Society Way of Life (1976-80). There was developed the theory of indication ordering of parameters set in initial (base) model of a forecasting object on an example of such complex objects in social forecasting as changes in the society way of life. But forecasts were remained only in some confidential reports from the monograph it was deleted all up to one.
- 4. Exploratory Social Forecasting: perspective problems of society. Essay of systematisation (1981-84). The author's concept of exploratory forecast specificity is developed as well as a system of modern global problems in context of globalisation as a special field of futures studies. Concerning the USSR are made exploratory forecasts of expected changes in social structure (with some corrections of estimations in the first project), in the system of needs, in the system of social organisation and control, in structures of social time and space, in spheres of labour, family life, education and culture. Clearly, in the final monograph there were only most common phrases.
- 5. Normative Social Forecasting: perspective goals of society. Essay of systematisation (1984-87). The author's concept of normative forecast specificity in its correlation with such a form of social control concretisation as goal-setting is developed. If to remove an inevitable that times in this area the umbrella of "scientific communism", so you can see forecasts of desired changes in decision-making of modern global problems, and concerning the USSR in spheres of labour and family life, health, education and culture, environment, social organisation and control. Of course, all these things were castrated in the final monograph, but a very important step was made to another field of futures studies, to alternativistics, developed in the monograph "Alternative Civilisation" (1991, published in Russian 1998, to be published in English by Publ. House Nova Science in New York, USA).
- 6. Forecasting Founding of Social Innovations (1987-90, the monograph was published in Russian in 1993). The theory of innovations in the social sphere is developed, as well as forecasts of radical changes in labour, division of powers, stabilisation of family, modernisation of school, social organisation of science, culture and health, optimisation of city building, salvation of nature, reduction of crime, desalcoholisation of Russian society. A special chapter was devoted to *alternativistics*. The publication of the monograph after years and years was gave by the price of refusal from the most radical innovations.

I am sure that among hundreds of such sectors dozens and dozens have realised similar projects but many without publications - secret reports for archives only.

4. Non-government forecasting organisation

It would be a mistake to say, that Soviet futurists reconciled with such situation. No, reaction this time was the same as in 60s: non-government movement expanding parallel with state forecasting service mentioned above, but no contacts between though there and there mostly there were the same people.

First, approximately since 1974 there were "half-underground" (a special Soviet term: it is no permission, but no prohibition) seminars on a loft of one building of Moscow Air Institute

with a hundred and more participants. In 1976 it was possible to create on this base a Commission of Technological Forecasting in system of the USSR Council (later: Union) of scientists and engineers societies. In 1979 the Commission was unwrapped in Committee of some ten commissions, beginning from that of theory, methodology, organisation of forecasting and ending that of social, economic, ecological, global problems of technological forecasting (Chairman of the Committee was S. Sarkisian, then V. Leontiev).

The Committee in 80s has restored scales of non-government organisations in the sphere of technological forecasting at 60-s: almost annually congresses with a thousand and more participants in university centres of near all 15 USSR republics, almost monthly (in Leningrad even - be-weekly) conferences and seminars with dozens and hundreds participants, a mountain of books and publications. However all this system could function only when publications and trips to meetings were paid by state budget. In 1988-90 all this system was disorganised and in 1991 paralysed, though much is formal existing till now (according the same principle: no permission and no prohibition).

After putsch in August, 1991 the Soviet censorship was disappeared, but on its place did appear the well known in Western countries "censorship of the market": published, "televisioned", and "radioned" all what is profitable for anyone who can pay therefore having mercenary interest. You can add to this an old paradox of any forecast known as *Oedipus Effect* - so-called self-fulfilling or self-destroying forecasts where prediction is annihilated by decision (action on decision).

5. Forecasting and decision-making

It is well known that decisions all over the world are accepted either in a voluntary way when a decision-maker acts intuitively or after preparing a decision in decision-maker's staff, and the chief only expounds it. In both cases intervention of a futurist warning about possible undesirable consequences of planned and the more so already accepted decision is perceived as an attempt on authority of the chief or, at least, on his staff. Also is rejected from a threshold. Basically problem is easily decided by connection of a futurist to process of decision-making at the earliest stage, when nobody's authority is not touched yet. But in practice it all over the world occurs rather seldom - mainly when it is necessary to accept an especially complex and risky decision.

So is going even in situation of market mechanisms and democratic regimes. What to tell about authoritarian and the more so totalitarian regimes? We have already mentioned, that forecasting and totalitarianism are incompatible basically. As a matter of fact there here is possible only a *mimicry* - imitation and profanation of forecasting.

The authoritarian regime - and it is completely kept not only in Russia, but also in other republics of the former USSR - opens, in comparison with totalitarianism, some practical opportunities of the valid, not fictitious forecasting. But these opportunities are not used anywhere by virtue of a number of psychological features of a typical authoritarian decision-maker.

First, such personality, as a rule, has not a high level of political and any other culture (people of high culture at an authoritarian regime either think scorn of politicians or, anyway, almost never make the way to top positions). Therefore such people always before hand is sure in correctness of their intuitive or prepared by the staff decision-making. To such people in general is alien any reflection concerning all conceived and made - especially concerning future things.

Secondly, such personality is always afraid, that any problem information, especially forecasts, can expose him in adverse light before authorities, contenders and enemies. Therefore it rejected *priory*.

At last, thirdly, when general background of forecasting is obviously inauspicious (and in Russia today any optimistic forecast from a threshold is perceived only ironically), the

reference to such information is fraught with danger of further demoralisation for a leader and his subordinated. Therefore any reference to future - especially to long-term forecasts - is usually avoided.

However, in mass consciousness of the people the desire is incredible "to glance into the future", to foresee, who will win next elections, what rate of dollar will be, what terrorists can undertake in following times, etc. Therefore in Russia of 90s, as mushrooms after a rain, appear dozens "centres of analysis and prognosis", which earn much money by attempts of such divination - almost always, as in a roulette, unsuccessful. They are not embarrassed of such attempts failure in 60-80s: nobody of futurists in the world that times did foresee the USSR disintegration and disappearance of "world socialist system", though there were enough of anti-Soviet theories (non forecasts!) like number less opuses of Brzesinski. And that many technological forecasts revealed gathering in the USSR and in "socialist camp" at the whole a very serious problem situation (more serious then all modern global problems!) developing in critical and further in catastrophic one was of no interest for politicians and men in the street. Was perceived in the best case for some futurists (including personally the author of this article) only as illustrations for something like "legal", non-dissident anti-Marxism. Equally as there was of no interest also normative forecasts of eventual normalisation of this problem situation.

Indeed, today the mass reader, TV spectator, radio listener not only in Russia, but in the world has too no interest for exploratory forecasts of development the global problem situation in critical and catastrophic one during the first half - may be, even first quarter - of next century. Equally as no interest for normative forecasts of eventual transition to an alternative civilisation capable to overcome such problems: it seems too abstract and too old-fashioned like Club of Rome some 30 years ago. But it is a tragic mistake!

Certainly, a forecast-divination, say, of the data of beginning the next world war with subsequent wreck of Euro-American civilisation (including Russia and all the Eastern Europe) like that of Ancient Rome Empire and by the same reasons could shock world public opinion like some first reports to Club of Rome 30 years ago. But this time such quasi-forecasts will be only a kind of imposture (not war - it is ripping and ripping with predetermined results, but attempts to foresee something unforeseeable in principle). And nevertheless, in the foreground of forecasting in Russia today, as well as all over the world, were and are attempts of divination.

Certainly, here and there in Russia as if on inertia there are elaborated technological forecasts too - but of no interest for government and society as years and years before. No more in hundreds, but in some - may be, in some dozens - futures research centres till this year (1999) having no regular contacts, very few people except, between them and with colleagues in the world.

6. Three case studies of 90s

By way of an illustration besides we should again refer to an example, the only well familiar because on personal experience (no information in this country of other activities at all!). That of Sector of social forecasting, Institute of Sociology, Russian Academy of Sciences.

In 1991-95 the sector has realised the 7th futures research project "Perspectives of Russia Transformation: an expertise future scenario building monitoring". Practically it was an annually questionnaire (three times) for some 60 top experts - equal groups of the economists, sociologists, politologists, and representatives of other disciplines - and construction a set of future scenarios on this base: inertial, evolutionary, revolutionary, catastrophic, ideal, optimal etc. By the way our experts did well predict in January-February 1991 the putsch in August 1991 (even the month!), in January-February 1992 the inevitable fall of the monetarist policy of Gaidar government to the end of this year (Gaidar was dismissed in December), in January-

February 1993 the civil war between Eltsin administration and Russian communist parliament after summer this year (the fusillade and dispersal of the parliament was in October this year) etc. But all this was not a main task of research. The final monograph under the same title was published in Russian in Publ. House of Moscow University in 1998. The methodological part of this monograph was published in Italian by Publ. House of Istituto di Sociologia Internationale, Gorizia, Italia in 1997. The publicistic version of the same problems was published in Russian in the book "Russia on the eve of XX1 century: 1904-2004 - from a colossus to a collapse and back" (to be published in English by Publ. House *Nova Science* in New York, USA). But limited circulation of all three books and the total collapse of the Russian books, magazines and newspapers market (with exception of detective and similar literature, "yellow press" etc.) resulted in that as these futures studies like all others remained unknown even for majority of Russian colleagues, let alone the foreign colleagues and wider reader's audience. And of course no attention of Russian government, politicians, scientists.

In 1996-2000 on the same monitoring technology the sector realises the 8th futures research project "Forecasting of expected and desired changes in Russian Education System" (Including sub-systems of parents and pre-school education, elementary, middle, and high school, universities, training and retraining of employee, general self-education of adults, complementary education in clubs of interest). There was published some intermediate reports and the final monograph. But there is no doubt, that all this is waited the destiny of the previous project. Anyway, there is no doubt, that it will not be used by any bodies of Russian national education management, which have today only one care: no changes because of fear not to deteriorate existing - very bad - situation. So this project is of no interest not only for government, but even for Russian academy of education, in spite of a fact, that director of this project is one of Academy's top managers.

Parallel, in 1993-1997 in framework of Department for education and culture, Russian academy of education was realised a special futures research project "Social forecasting and perspectives of culture" (final monograph in Russian in 1997). In fact there are forecasts of expected and desired changes in all twelve types of culture establishments: books-magazines-newspapers business, TV and radio, cinema and theatre, club and museum, public library, city and national park, sports, with the same destiny concerning practical results as mentioned above.

Indeed, similar examples can be continued, but all reminded unknown behind frameworks of that or other research group till creation of Russian and International futures research academies in 1997-99 (see below thereabout). Before creation of these bodies there was in Russia nearly ten years long (1988-97) no body, no bulletin, no any information exchange between Russian futurists.

7. Towards Russian Futures Studies Academy

It is necessary to tell, that Russian futurists during these ten years undertook and continue to undertake some attempts to leave from a situation of the tightened information paralyses.

Since the end of 80s, when the Soviet repressive-censorial system began to collapse, some new non-government organisations in the sphere of forecasting like that in 60s and 70s were spontaneously arisen: "Association for the Future in Co-Operation with World Futures Studies Federation" (President - I. Bestuzhev-Lada), Association "Forecasts and Cycles" (President - J. Yakovez), Association of Financial Analysts and Futurists (President - J. Sidelnikov). In 1997, after some years of negotiations, these organisations, together with "Kondratiev Foundation", research centres "Applied Prognostics", "Strategy", Centre of Human Values did form the Russian Futures Studies Academy (Akademia prognozirovania) structuring in many branch and regional departments (President - I. Bestuzhev-Lada). The Academy has begun realisation of several research projects (some of it see below), publication of "Bulletin", "Magazine" and "Yearbook". But without a well-developed

marketing in national and international scale this work is doomed on inevitable attenuation. That's why the Academy in 1999 was coming to International Futures Research Academy as a confederation of national academies of the same profile with a common task: to create a civilised forecasts market including governmental section and also such international organisations as UNO, UNESCO etc., in co-operation with World Future Society, World Futures Studies Federation, Futuribles International and other futurists organisations (Secretary General of the Academy Organizing Committee - A. Gasparini, Italy).

First joint research project of the Academy "A country and the world in 2001-2010: problems and decisions" is oriented on the market mentioned above. First potential participants are around two dozens countries all over the world. Time of the project realisation is: January 1 - June 30, 2000. There will be exploratory and normative forecasts on ten aspects of expected and desired changes in each appropriate country:

Environment: minimisation of "ecological disaster zones";

Population: overcoming depopulation trends;

Settlement: crisis of cities and degradation of villages;

Economics, finances, and employment in process of total computerisation;

Tourism as one of leading industries of 21st century;

Transportation, communication, computerisation;

Education and culture versus anti-culture;

Physiology and psychology of a human being in process of cyborgization of a personality;

State security: disasters of nature, criminality, terrorism, war;

Geopolitics: a country in the world.

Certainly, in the Russian book market always there are a lot of books "about the future of Russia and World". And in 2000 under millennium hysteria them will be ever more. Here you often can meet the word "forecast" but really there are the same "reflections on the future" as hundred years ago. There is no research on which base a book or an article is written. And almost all authors do not suspect about existing of technological forecasting with its forty years history.

May be, will remind thereabout an "Anthology of Technological Forecasting Classics: 1952-1999", which is published by Russian Futures Studies Academy and which includes the key chapters from the basic works of R. Jungk, T. Gordon, O. Helmer, B. de Jouvenel, D. Bell, E. Jantsch, H. Kahn, J. Mchale, F. Polak, E. Cornish, J. Galtung, O. Flechtheim, A. Toffler, A. Peccei, D&D Meadows and others authors of reports to the Club of Rome, H. Henderson, J. Naisbitt and others, alternated by reports of concrete forecasts and brilliant illustrations concerning next century.

8. Participation in International Futurists Associations

In this connection pertinently to remind a drama history of the USSR participation in international futurists associations. Since 1967 and till 90s there appeared in all international futures research directories only one-two Soviet names out of hundreds in reality, and always the same. The reasons were that Soviet "official science" was in principle against any interdisciplinary studies like cybernetics or futures studies, and there was no permission for any participation in such things, and "top bureaucrats" in science who could get such permission were afraid because of their career, and others simply had no real possibilities to take part. It is enough to tell that it was only one Soviet Club of Rome member and only because he was husband of Soviet Prime Minister daughter.

In 1967 one Soviet futurist have allowed to publish his works in futures studies under his real surname. Before since 1951 he had no opportunity for publications at all (only letters to Stalin and others Soviet leaders with no reaction of course), and since 1961 he has published some books and articles under a pseudonym. Becoming "legal" he began negotiations with R. Jungk and B. de Jouvenel about creation a World Federation of existing to that time futurists

associations, and therefore all three were elected later as honorary members of the Federation. But not of associations, simply of some hundreds individual and some dozens institutional members only, because the Soviet participant of negotiations was to that time repressed and has no possibility to help in negotiations between existing futurists associations. When he was at last got free of his more then a year and half "home arrest", he as all his Soviet colleagues had no permission to take part in activities of any associations or federations of "bourgeois futurology". And only the status of an Honorary member for what there was necessary no permission did give him since 1984 such a possibility. But in 1996 this status was abolished in principle, and another problem arisen. Very few people in the West understand the difference of living standards in the 1st, 2d, and 3d worlds in the world. As a matter of fact ten dollars of a month per capita income in the 3d world are quite the same typical (mass, middle etc.) case as hundred dollars in the 2d (including Russia) and thousand in the 1st. So for example a \$40 or 300 fee, a \$50 dinner, a \$100 hotel, a \$1000 air-ticket etc. are for a Russian participant with his typical salary quite the same thing as \$ 400 or 3000 fee, \$500 dinner, \$1000 hotel, \$10000 air-ticket for an American or West European. And if he is not of "New Russians" (2% of Russians) or has no access to the Western system of sponsorship (very few have) so no possibilities to take part at all.

In 1970, before his "home arrest", the same Soviet futurist on the 7th Congress of International Sociological Association in Varna, Bulgaria did initiate creation of a research committee on futurology (later - ISA RC-07 Futures Research). He was elected as President of the Committee, but having no chancery for telecommunications and being in situation of "iron curtain", especially concerning the "bourgeois futurology" he asked his personal friend Bertrand de Jouvenel to help as co-president (also elected). After the death of de Jouvenel he was replaced on the same post by his another personal friend Eleonora Masini. And both together as two co-presidents did their charge till 1996, because there was no practical alternative for this co-presidency. At the end after some attempts in 1996 new Presidium of the Committee was elected. And the founder of the Committee has received an invitation letter to take part in Committee activities as if he was a tyro in this case. His name was deleted from a history of the Committee.

So in practice worked the "iron curtain" in the sphere of futures studies.

Let us hope, that now, with creation of the International Futures Research Academy as a kind of daughter organisation of World Future Society, World Futures Studies Federation, Futuribles International and other futurists associations (you see here the idea of the "federation of associations" mentioned above), as a confederation of some dozens national futures studies academies this type (to the end of 1999 there were around two dozens of institutional members of the International academy), as a network of joint futures research projects - let us hope that now Russia and other republics of the former USSR will begin to leave from isolation in the sphere of futures studies in the world.

9. Teaching young futurists

It is necessary to tell some words about a quality of the futures research next generation, i.e. about relation to the future of today students in Russia.

In principle it is quite the same as of all population: curiosity quickly passing in indifference. The curiosity, because always is interesting to find out something "about the future". Indifference, because the study of the future, as well as of the past, does not give any practical results for the present, and will not be claimed attention by a society. Besides has an effect the *presentism* of ordinary consciousness mentioned above. It is also important the discredit of forecasting focused on divination because of nearly always appeared insolvent. And during last ten years to all this is added in Russia the total demoralisation of population in general and of the youth in particular. For the prospects without any forecasts open most gloomy.

That is why attempts to adjust the teaching of technological forecasting as a special educational subject at university from the end of 60-s till nowadays invariable suffered failure. Sometimes at that or other university it was possible on any time to create even chairs of forecasting (such chairs were available in Moscow, Leningrad, Novosibirsk, Kiev, Sverdlovsk, Alma-Ata), but it earlier or later should be closed, as there was a insoluble problem of students specialisation and then employment. It was said, that futures studies are interdisciplinary on the character, but Soviet science and teaching are strictly mono disciplinary in principle. Some enthusiasts managed by years to read lectures and lead seminars on forecasting at several faculties of several universities (at the Moscow university, for example, such lectures and seminars are taken place since 1969 till now), but it is of course not obligatory courses, facultative for wishing only. As the manuals there are used till now some text books of 70-80s and "Handbook on Forecasting" (1982).

The similar situation has developed with PhD (candidate of science in Russia) and DSc dissertations. There are in Russian central libraries some hundreds, if not thousands dissertations "on forecasting" 1967-99. But as well as in monographs you will vainly search here even for one concrete forecast. Even a dissertation "on forecasting methodology" is a desperately courageous step connected to raise risk not to receive the necessary majority votes of the scientific council members. Thus nearly each tenth DSc dissertation "on forecasting" was declined by dogmatic in such councils. And to try to give concrete forecast in your dissertation means obviously to go on scandal and failure. And for what? From nearly a hundred and half of my formal or informal post-graduate students only two young ladies (now not so young) continue to be engaged in forecasting, and that only as university professors, one of two later even as dean and rector. Others have found to themselves more profitable employment, claimed by the state and society.

This sad situation is beginning gradually to be improved only since the middle of 90s, when nearly annually "Summer schools for young futurists" has taken place with some dozens students, post-graduates and young fellows of several universities. Since 1997 in new created Russian Futures Studies Academy a special section for young futurist improvers is organised, though really functioning only in Northwest department of the Academy (St. Petersburg). Here we see a good perspective for summer and winter schools of young futurists on the more regular base.

On something greater in the foreseeable future hardly it is possible to expect.

FUTURES STUDIES IN YUGOSLAVIA

Radmila Nakarada

The Questionnaire presupposes conditions of social normality, continuity and intensive professional communications. Reality in Yugoslavia is radically different, and thus what may seem a rather simple exercise for others is a difficult task for me.

After a complete breakdown of the state and society, a terrible war that has isolated present Yugoslavia, futures research seems like a distant past. The period you are referring to from 1960 to 1999 covers the golden age of the socialist regime, its crisis, eruption of nationalism, secessionism, and its breakdown. The state that was closest to EU as the end of eighties plunged into a series of tragic wars and final breakdown. In other words, in the case of Yugoslavia the space of your research has in the meantime disintegrated. Out of one state, five states emerged.

In the present Yugoslavia the strength of the past, unresolved problems and wounds, and the weight of the present completely excluded the future as a long-term concept, as a coordinated movement with the surrounding world, as political and economic restructuring toward a higher level of development. Going through violent conflicts, sanctions, media satanization, shattering economic crisis, bombing the future was lost in widespread apathy. In other words, the sociological relations between the predicament of the society and the stance toward the future are well illustrated by the drama of Yugoslavia. In an ongoing total social crisis, the dimension of the future becomes an abstraction. Second, as far as I know, futures researchers did not anticipate the type of crisis that would evolve in a number of places after the end of Cold war.

Futures research began to develop its roots in the old Yugoslavia when the society was a dynamic entity, when a privileged place in the world community seemed secure, i.e. when there was hope, openness profound social interest in development. Technology, education (Miroslav Pecujlic, The University of the Future, 1980, translated in English, Spanish, Italian), environment/urbanism were spheres of prime interest, although there were attempts to problematize also human needs, values. The then current streams of thought in this field were translated, reviewed, discussed. The public was well acquainted with Jouvenel, Jungk, Meadows, Kahn, Richta, and in tune with the ideas that were then prevalent. (For instance, Miroslav Pecujlic, wrote a book The Future that Began at the same time Richta's Civilization on the Crossroads, was published).

Some of the Yugoslavs were involved in the very beginnings of international attempts to situate futures studies within a humanistic framework. Prof. *Mihailo Markovic* took part in the famous Oslo meeting with *Johan Galtung* and *Robert Jungk*, and later on was one of the founders of WFSF, and for two terms its Vice-President while I was a member of the Steering Committee. In Dubrovnik, during the seventies, at the Inter-University Post-graduate Centre for several years courses in Futures Studies were offered. However, other than public lectures, and sporadic courses at some faculties, no systematic studies of the future were established within the Yugoslav educational system.

In the mid eighties Academy of Arts and Sciences Prof. *Markovic* organized a Committee for FS that met on a regular basis for a while, discussing problems of development and human needs. (*Mihailo Markovic* ed. *The needs of social development*, SANU, Belgrade, 1991).

A group of engineers (*Rajko Tomovic*, *Slobodan Radoman*) organized around their professional organization ETAN an interdisciplinary group that dealt with visions of an all encompassed strategy of development (*S. Radoman, V. Stambuk*, eds. *Developing countries and paths of development*, 1979). There were also attempts to launch futures research in Novi Sad (Prof. *Stefan Han*, Ambassador *Laslo Bala*, Prof. *Dusan Ristic*) within the Vojvodina Academy of Arts and Sciences. Later on, in the late eighties Prof. *Han, Ristic, Markovic*,

Pecujlic and myself established a branch of WFSF but it never got off the ground, the crisis was pressing and interest in futures research was not extensive. Yugoslavia was also a venue of a number of conferences dealing with futures studies issues. As an illustration, let me mention that one of WFSF was held in Dubrovnik during the Presidential mandate of Johan Galtung, the first International Seminar on Science and Technology on the Transformation of the World, as part of the project Socio-Cultural Alternatives in Changing World (UNU and Belgrade University) was held in Belgrade, as well as regular conferences Science and Society in Herceg Novi.

After 5th of October 2000, political change has occurred and we are now in a process of transition. It is too early to say, whether extensive and profound futures research will reemerge. For the moment, we are living a paradox, as if the model of the desirable future is fully known, all we have to do is apply it. This is the outcome of the prevailing aim among the ex socialist countries to become part of the European integration process, Partnership for Peace, NATO, that is, the future is to become part of the developed West, globalizing world. For that reason there is not much inter/regional trade or integration in the Balkans, each country is running for itself toward the distant Europe. The historical specificities, social costs of hasty reforms are easily overlooked. This is however, a reflection of a phenomenon that is global. i.e. not many alternatives, visions exist anywhere today. Perhaps, once some firm ground is reached, the first phase of transition is accomplished, the visionary thread will emerge, and the interest for futures studies will reappear. Reforms of the educational system are now being initiated and there is reason to believe that space will be created for new contents, including futures studies. However, since the political changes have not ended some of Yugoslavia's greatest uncertainties, the overwhelming pressure of the immediate present may still continue for some time.

As far as the Yugoslav youth is concerned their vision of the future is to become part of the western glittering, consumption society, the future is in the external world, the EU. If generalizations are allowed, youngsters here have, by and large, felt deprived of a normal life, normal communications with their counterparts in Europe, i.e. of material means and visas. Now they are, as some of my students have said, "hungry for consumption", eager to travel and if possible find good jobs outside of Yugoslavia. Their future is related to their personal, immediate betterment. No great visions, collective concerns are attractive. However, keeping up with the high-tech developments, particularly in information sciences is important, as well as ecological concerns. Ecological concerns have grown particularly after the NATO bombing and the use of depleted uranium. It will take some dwelling in relative normal circumstances before their creative, visionary energy is rekindled.

PART TWO: SYNTHESIS

THE COMPREHENSIVE PICTURE BASED ON THE ANSWERS TO THE QUESTIONNAIRE

Viorica Ramba Varga

1. Introductory words

The futures research (futures studies) experiences in Central and Eastern European countries written from inside represents an original part of the post-war European culture. That is why we have started to explore the original cultural phenomenon before it might be forgotten.

In 1999 the Editorial Board elaborated a Questionnaire containing six questions aiming to make possible conduct an international comparative analysis for the researchers interested in it

As there is no answer to every question from the approached countries, the picture will be rather laconic, suffering from numerous gaps. One may also take in account subjective elements contain in the answers.

The chosen methodology will formulate one after the other all six questions and gives the predominant convergent and/or divergent answers resulting from the Questionnaire, even if there are some inequalities in the details of the given information.

2. Similarities and differences among the countries considered

Q1. What institute(s) in your country did effect futures studies, research programs in the years 1960-1990, are effecting now? (The name of institute, city etc.) In sixties:

The answers show notable *similarities* for the sixties, such as:

The futurology like a newly born science discipline puts its wonderful collection of forecasting methods (see *Erich Janstch*) at the disposal of the futures oriented thinkers, and of decision makers. There was a great interest for the *methodological* aspects that had prevalence in future oriented thinking. Also, there existed a vivid interest for the "distant" future, like the year 2000. Hundreds of book on forecasting methodology were published. Also university curricula used forecasting methods in strategic and integrative studies, e.g. Czechoslovakia, Hungary, Poland. In the USSR there were around 1000 departments of forecasting among 5000 USSR research institutes in 1966-1971.

In the late sixties a project having the title "Civilization on the Crossroads" was provided by the interdisciplinary research team of the Czechoslovak Academy of Sciences headed by the philosopher Radovan Richta. More than 80 experts elaborated the scenario of the future development of industrial society, under the presumption that its political regime could follow the practice of socialist regime. The book stimulated wide professional discussions among politicians and futurologically oriented thinkers, and was translated in France, Italy, Romania, the USSR etc. At the same time with Richta's book in Yugoslavia was published M. Pecujlic's book, "The Future that Began" and the public was well acquainted with Bertrand de Jouvenel, Robert Jungk, Herman Kahn, Radovan Richta and others.

In seventies and eighties:

Much enough similarities existed also. Futures research was definitively *divided* in two great streams in each country, with some time variations.

An "official forecast" raised and was related to the central planning activities. It was methodologically subordinated to the State Planning Committees (having specific denomination in each country). There was a need for more information about future trends as foundation for decisions to be made and the ways to be chosen: "How to organise society in the period of the global transition from capitalist via socialism to communism? How to "unbound" the productive forces? How should the economy be planned in that age of transition? How could scientific-technological progress be mastered to the benefit of the

people?" (See Karlheinz Steinmüller: From anticipations of a bright future to dissolution in this book). The National State Planning Committees in these countries elaborated and promoted planned research and programming (short term - 5 years, medium term - 10 years). They elaborated also its visions of long-term development in which expected innovations were taken like guides for all productive and consumer activities of the population. The market economy analyses and social assessment of expected structural changes of the national economy were absent.

Analogically, some Academy of Sciences in these countries elaborated lists of the most promising fields of scientific researches for them, including expected equipment for experimental technology for the next 15 years, e.g. Czechoslovakia, Hungary, Poland, Romania, the USSR.

At the same time an "unofficial prognostics" tendency, born in sixties, was gradually rejected because of its "thinking different" capability, as a kind of "internal emigration", or an "internal criticism". For example:

in 1971 a special state forecasting system was created in the USSR: "The Scientific Council on complex Programming of Technological Progress" having 52 commissions, which were active in 1972-1990. Futures studies continue in framework of technological forecasting only in few research centres, like Department of Social Forecasting, USSR Academy of Sciences, Institute of Sociology;

in Romania the inhibition appeared later, after 1975, after the flourishment manifested in 1972 by holding in Bucharest the 3rd World Conference on Futures Research with participation of Bertrand de Jouvenel, Johan Galtung, Gennady M. Dobrov, Jacques Delors, Eleonora Masini, Peter Menke-Glückert and after the creation of Centre for Futures Research at the University of Bucharest (1971) and of the International Centre for the Methodology of Futures Research (1973); of the Committee for Prospective Studies of Romanian Academy (1974).

Besides the similarities it is to mention some differences. The main aspects refer to the fact, that in some countries such as Czechoslovakia, GDR, Hungary, Poland, Yugoslavia there were not a strong inhibition for the futures research. For example, in Czechoslovakia the "unofficial prognostics" orientation was subordinated to the civic interest in the renewal of democracy. Its institutional form was shaped mainly by private and academic initiatives. Unofficial futurologist concentrated their efforts on gathering forecasting methodology knowledge from abroad and on critics of the official policy. Their results helped to formulate alternative strategies for political decisions what were publicly appreciated namely after "velvet revolution" in 1989, when many members of an unofficial prognostics became active politicians. But even here, there was an official incident, when the sessions of the Czechoslovak Scientific and Technological Society, where above hundred intellectuals were discussing alternatives to the existing political scene, were officially forbidden in 1987. In the good manner of resistance the members acted in renewing public conferences and published their unofficial journal "Prognostika". (See Frantisek Petrasek: "Futures Studies in the Czech Republic" in this book.) While the futures studies in GDR have been absorbed into the daily business of politics and ideology a new concern about the future grew, partly within the small opposition movement, partly under the roof of the churches, partly in academic institutions, but as in other countries too, mostly without any definite organisational basis. Quite generally, future thinking - in the form of peace and civil rights movement and of the concern for the ecological problems - contributed to the fall of the system.

In the early nineties (Mention: for the last decade, please, see further Q4.):

After 1989 an unexpected, surprising, paradoxical phenomenon appeared at the very beginning of nineties: the decreased public interest in the futures studies, concomitantly with declined, almost collapsed forecasting activities at all levels.

Let us review a few aspects concerning the circumstances, which in this phenomenon occurred in the beginning of '90th.

Dismantling state planning and the new transition processes to market economy in the former socialist countries in Central and Eastern Europe have led in the *early 1990s* to the dissolution and even incrimination of the futures researchers ordered and financed by the state. No proper short-, medium and long-term development project was elaborated in place of the plan for the societies in the region. Nor was elaborated the perspective concept of their various economic sectors' evolution and/or involution. Problems of survival and short-term tasks in economic restructuring situation were prevalent. The present completely excluded long-term concept of the future in inside structures of these countries. Except two guidelines: the programmes of the EU and NATO integration stipulations. In achieving such criterion, the Central and Eastern European countries reached very different stages to date.

Q2. The most important fields of futures research programs in your country between 1960-1990, since 1990 (today) (E.g. social, educational, health care, economic, cultural, political, technological, environmental, and others.)

The *convergent* answers show that *in 1966-1990* the most part of forecasting activities were related to *industries and economics* (e.g. 2/3 respective 1/3 in the USSR) followed by *urbanism, territorial systematisation* and *city building* and *demographic prognoses*. Comparatively, a relative little part of futures research faced such broad social matters as education, health care, environmental politics, demographic prognosis. Exception is Poland, where the demographic prognosis was well founded, as one of the first in Europe, as well as the Polish research on the dangers associated with social pathologies, like alcoholism, delinquency etc.

The 1989 changes interrupted temporarily the long-term futures researches. After the fall of the Berlin Wall (not foreseen by the futures researchers) the East German science was restructured and integrated into the West German research landscape. Some researchers work in technological assessment or related areas. Like in Bulgaria and Slovakia, where a great number of specialists in forecasting, among the most competent, entered politics, others found better remunerated jobs in private companies. The total number of active forecasters declined rapidly along with interest in forecasting itself. (See S. Zajac: "Futures Studies in Slovakia" in this book.)

After 1990, economic forecasts (macroeconomic, sectorial analyses, regional project studies) are followed by political, social, environmental, educational, health care, a few of technical and other field of futures research programs. But this preoccupation is rather *timid* in the 90s. Economic restructuration policy paid a little attention to the future of some important branches of economy like the heavy industry, the agriculture, the most important economic domains in these countries in 1960-1990 (see Romania). Comprehensive strategic studies for development of the countries appears only in the late 1990s, excepting Hungary, Poland, the Czech Republic, where appeared earlier. The main interest concerns the assessment of opportunities to meet the European Integration requirements.

Q3. Please indicate 3-6 more important futures studies concerning the futures of the fields mentioned above of your home country,

of global interest written and published in your country, with bibliography.

There is a *long* and *interesting* list which merit the effort to consult every country's answers. Here is *some cull of it*:

BULGARIA

1. The Fourth Civilisation, A. Tomov, no year indic.

THE CZECH REPUBLIC

Civilisation on the Crossroads, R. Richta, Prague, 1969 (translated in France, Italy, Russia, Romania etc.)

Prognostica, unofficial journal of the Czechoslovak futures researchers, Prague, 1987

After 1990

Dialogs with the Future - a futurological revue, Prague, 1991

A Relevance of the Futurology for the Policy-making, K. Skalicki, Prague, 1997

Starting Point to the Strategic Outlook, F. Petrasek, Prague, 2000

Threshold 21, The Czech Republic: Model of the Sustainable Development, M. Bedny, Olomouc, 1999

ESTONIA

Economic and Social Prognostics, R. Reuter, A. Schipai, Tallinn, 1977

Global problems and futures scenarios, L. Valt, no year indic.

Scenario - packages concerning rural life in Estonia - with central point in reestablishment of private farming and real local government, Tallinn, 1986

Economically independent Estoni's project, 1987

After 1990

The models of:

- "Liberal development Estonia",
- "Green (sustainable) development",
- "Continuing trends" were publicly compared, 1991

Document called *Guidelines for Estonian spatial development until 2010*, prepared by team from Estonian Institute for Futures Studies, Tallinn, 1999

Scenarios for development of Central Baltic Sea Region - until 2015, prepared by international working group leaded by EIFFS, 1999

THE GERMAN DEMOCRATIC REPUBLIC

Gesellschaftsprognostik. Probleme einer neuen Wissenshaft. G. Heyden (ed.), Deutscher Verlag der Wissenschaften, Berlin, 1968

Futurologie. Eine Kritishe Analyse burgerlicher Zukunftsforschung. A. Bonish, Akademie Verlag, Berlin, 1971

After 1990

Visionen. 1990-2000-2100. Eine Chronik der Zukunft. A. Steinmüller, Hamburg, 1992

Zukunftforshung in Europa. Ein Abriss der Geschicht. K. Steinmuller and ot. Nomos, Baden-Baden, 2000

HUNGARY

Long-Range Perspectives and Planning. G. Kovács, Budapest, 1970

Practice of Futures Research and Forecasting. A Handbook of Methodology. L. Besenyei, E. Gidai, E. Nováky, Budapest, 1977

Futures Research. G. Kovács, É. Hideg, A. Korompai, E. Nováky (ed. E. Nováky) Budapest, 1992

Of global interest

Future Research in Hungary. Budapest, 1983

Developing Environmental Strategies through Futures Research (ed. by E. Nováky) Budapest, 1991

The unfolding new worlds and economics. J. Hoós, Budapest, 1997

On the Eve of the 21st century (ed. E. Gidai) Budapest, 1998

POLAND

Polish society at the brink of the 20th century and of the 21st century. Warsaw, 1985 In the perspective of the year 2010. Warsaw, 1995

Strategy for Poland's development up to the year 2020. Synthesis. Warsaw, 2000

Changes in the structure of Poland's economy until 2010. Poland in the light of the European Union (A. Karpinski, S. Paradysz, J. Ziemiecki) Warsaw, 1999

Of global interest

Civilisational megatrends vs. the process of system transformation, J. Pajestka: In: For the orientation on the future in Polish reforms, Warsaw, 1994

Wealth and poverty of nations, S. Albinowski, Warsaw, 1995

Globalisation of the world economy vs. regional integration. Warsaw, 1998

ROMANIA

The Chronicle of the Year 2000. M. Malitza, Bucharest, 1969

The series Mankind Global Problems. Collective volumes of 25-30 chapters each

Handbook of Perspective Techniques in Romania. M. Botez, Bucharest, 1974

After 1990

Ten thousand cultures, one single civilization. M. Malitza, Bucharest, 1998

Macro Models of Romanian Transition Economy. E. Dobrescu, Bucharest, 1996, 1998

Old and new cultural ecologies on the eve of IIIth Millennium. V. Ramba Varga, Bucharest, 1999

Quarterly review Millennium III. Issued after 1999. Directed by Mircea Malitza. Among the members of the board are Federico Mayor, Lawrence Klein and Ilya Prigogine (Nobel Prize laureates), Ricardo Diez-Hochleitner, Pentti Malaska, Rosemann Runte, E.U. Wiezsäker, Jean d'Ormesson, Sergei Kapitza

RUSSIA

After 1990

Russia on the Eve of XXI. Century: 1904-2004. From a Colossus to the Collapse and Back. I. V., Bestuzhev-Lada, Moscow, 1997

Perspectives of Russia Transformation. An Experts Scenario-Forecasting Monitoring. I. V. Bestuzhev-Lada, Moscow, 1998

Estimated and Desired Changes in Russian Educational System. Bestuzhev-Lada, I.V. and coll., Moscow, 2000

Of global interest

Globalistics: Towards Doomsday. Can We Avoid the Foretold in Apocalypsis? Bestuzhev-Lada, I. V., Moscow, 1996

Alternativistics: Towards an Alternative Civilization. Bestuzhev-Lada, I. V., Moscow, 1998

Ahead is the XXI. Century. An Anthology of Modern Classics in Futures Studies 1952-1999. I. V. Bestuzhev-Lada (ed) Moscow, 2000

SLOVAKIA

Prognosing the Scientific Advancement (in Slovak), F. Gal. et al., Bratislava, Veda, 1990 Slovakia at the Turn of the Third Millenium (in Slovak), J. Markus et al, Bratislava, Veda, 1999

Slovakia in the early 1990's. Society-Economy-Science and Technology (in Slovak), L. Faltan et al, Bratislava, Institute for Forecasting SAS, 1994

Forecasting in the Transition Society, International Conference, Smolenice Castle, November 20-21 1999, Edited by S. Zajac, Institute for Forecasting SAS, 1998

The Long-term Tendencies in Selective Areas of the Slovak Society up to 2015. Zajac Stefan et al, Bratislava, Institute for Forecasting, SAS, 2000

Of global interest, written and published in SLovakia:

Kelet-Közép-Európa: Honnan - Hova? (ECE: Where from - where to?) Eds.: É. Ehrlich, G. Révész, P. Tamási, Akadémiai Kiadó, 1994

YUGOSLAVIA

The Future that Began. M. Pecuilic, Belgrade, 1969

Developing countries and paths of development, eds. S. Radoman, V. Stambuk, Belgrade, 1979

The University of the Future. M. Pecujlic, Belgrade, 1980

The first "International Seminar on Science and Technology" as a part of the project "Socio-Cultural Alternatives in Changing World" was held in Belgrad by UNO and Belgrade University in eighties.

The needs of social development. M. Markovic ed., Belgrade, 1991

- Q4. Please explain whether a significant change was seen in the period of transition on the future orientation of the population and even in the fields of futures studies activities.
 - a) If there was progress, name the fields,
- b) If accidentally the interest and activities declined please, indicate the probable reasons, like the lack of interest of decision makers, the lack of global vision about future importance of the different fields of human activities, loss of people's interest in a longer than one year futures perspective, other(s).

The answers to this question show some *sporadic similarities* in some countries at the point a), and *quasi-general similarities* at the point b).

a) There was a progress in the use of econometric models in application to prognoses, mainly in the methodology (Poland). The same progress was made in the methodology of prospective studies due to both the opening the international specialized literature and the contact with foreign experts (Estonia, Romania). New institutes have been founded for the forecasting, especially for the economic forecasting. Futures researches have begun rethinking the theoretical, methodological and methodical knowledge base for futures studies in the circumstances of instability (Hungary).

In Bulgaria the change during the transitional period manifests in the fact that, "persons who take part in the government are connected with the Bulgarian futurists. Members of the Foundation's Board of Trustees used to be prime-ministers, vice-prime-ministers, bank directors, experts" (see A. Tomov: "Futures studies in Bulgaria" in this book).

The Slovakian answer: there was no progress.

b) In the Czech Republic in last ten years from methodological viewpoint, a gap can be seen in comparison with the seventies and eighties regarding the implementation of futures studies in institutionally established industrial societies. The interest in long-term (15 years) perspective was replaced by the state government and enterprises with the short time decision-making. Futures studies at the Czechoslovak Academy of Sciences were interrupted and no research and pedagogical unit exists under the state care since that time (see F. Petrasek: "Futures Studies in the Czech Republic" in this book).

In Poland the interest of public opinion in the futures studies clearly decreased after 1989, for the main reasons:

Society's rush toward short-term gain (paid work, financial advantages).

Loss of interest of the politicians and decision-makers in the future periods exceeding the 4 year cycle of the parliament life partially due to the involvement of political decision-makers mainly in the current matters.

Critique of the former planning and forecasting.

Failures of the former prognoses from before 1989 - wrong or missed assessments.

Methodological misunderstandings; a) identifying strategy studies on the future with prognoses of the traditional style (see A. Karpinski: "Futures Studies in Poland" in this book).

In Romania the main reason for a certain neglect of futures studies after 1989 was the general rejection of anything that reminded the notion of social or economic plan or planning, badly abused of in the previous regime.

Officially, the interest for prospective studies decreased after the collapse of centralized planning model. The specific evolution can be explained through the appearance of an unstable, uncertain and unpredictable economic environment in the transition period. Another element that led to *decreasing* the interest in prospective studies consists in the lack of institutions and powerful companies to monitor the making of long-term strategies on the market; in a high inflation environment, a severe economic slump background, the firm strategies were mostly of surviving.

In Russia in the 90s nearly all forecasting activities were collapsed. The interest for the future and futures in Russia has began decline due the lack of dialogue between futurists and decision makers, due "the psychological fatigue" of endless doomsday prophecies of globalistics, and due to rather utopian character of alternativistics. (See I. Bestuzhev-Lada: "Futures Studies in the USSR/Russia" in this book).

In Slovakia the indicated reasons for the decline of future interest and activities are: first of all, the lack of interest of political elite, the lack of vision about the future importance of the different felds of human activities, the loss of interest in a longer than one year future perspective.

In Yugoslavia, after the 1960-1999s blossoming development, the present drama of Yugoslavia "completely excluded the future as a long-term concept, as a coordinated movement with the surrounding world, as political and economic restructuring toward a higher level of development. Going through violent conflicts, sanctions, media satanization, shattering economic crisis, bombing, the future was lost in a widespread apathy. In an ongoing total social crisis, the dimension of the future becomes an abstraction" (see R. Nakarada: "Futures Studies in Yugoslavia" in this book).

At the edge of this picture one may *conclude*, that the last decade shows, paradoxically, a certain fall in unofficial as well as the governmental interest for futures research. A hypothetical explanation of the phenomenon could be at the crossroads of such elements as: lack of financial and material resources; lack of interest by decision-makers; lack of a global vision on the future importance of various human activities; growing uncertainty on a global scale; loss of interest by public at large for future perspectives beyond one year and spreading interest for the "palpable immediate" ("hic et nunc"), etc.

Thus, a sort of paralysing perplexity in the face of a more and more uncertain future appeared. In this context, the *loosening interest for futures research* begets a paradoxical dimension both at cultural and psycho-sociological levels, not only in the region's countries, but also perhaps worldwide.

The paradox of the phenomenon becomes striking in the centre of the emergence of a new set of problems concerning this countries' inner transitional processes; the end of the Cold War as well as the galloping pace of the globalisation process.

Q5. In your feelings the futures studies in your country will tend to revive in the near future and the millennium? In both cases: yes or no, please indicate why.

Most of the answers are convergently *positive*. *The motivations* in some countries are mostly connected to the *external factors* first of all to the requirements of the European Union (Polish), Estonian answers remarks that the EU is demanding to work out some long-term strategy development.

Romanian answers mentioning the confidence in reviving futures studies, estimating that probably, on short term the present situation is bound to last. The interest to join the European Union and the requirements of the international organization revived the attention paid to long-term thinking on development, expressed in the preparation of economic and social strategies. The Academy has launched a program, called ESSEN (Evaluation of the system of the natural economy), which played an important role in this direction.

But there are also *proper* future oriented preoccupations. Some examples.

In Poland are effecting futures researches now, institutions, such as Futures Studies Committee "Poland 2000 Plus" of the Presidium of the Polish Academy of Sciences, Warsaw; Governmental Centre for Strategic Studies, Warsaw; University of Lodz.

In Romania, after the dissolution of Planning State Committee in 1990, the Economic Forecasting Institute became subordinated to the Romanian Academy, Bucharest; likewise, a group of prospective investigation of Romanian Academy "Romania 2020" effects future oriented investigation; a Ministry for Development and Prognosis was created in January 2001 in Bucharest.

In Bulgaria, reform in the Bulgarian Future Society and involvement of new young scholars in it is on the way.

The futures studies in Russia will tend to revive because growing interest among people including decision-makers for perspective problems and ways of its solutions in the future. Some fall non-governmental forecasting organizations (arose in 60s and 70s) after some years of negotiations, together with the "Kondratiev Foundation" research centres applied prognostics, "Strategy", "Centre of Human values" formed in 1997 the Russian Futures Studies Academy at Moscow. It was created as a research network of some 36 futures research groups in some 10 regional departments. In 1999 this Academy was incorporated as an institutional member into International Futures Research Academy, and during the year 2000 has executed its part of joint research project "Russia and the World in 2001-2010: Problems and Decisions" (See I. Bestuzhev-Lada: "Futures Studies in the USSR/Russia" in this book.)

In the Czech Republic in 1999 the new stimulation of more long-term and complex thinking has appeared by the new government initiated project of strategic management for the governmental socio-economic policy. Futures studies for establishing national interests and dispositions for joining the EU, are supposed for that aim.

Slovakian answer is very confident in the revival of futures studies mainly for two reasons: 1) Ministry of Education is preparing some kind of technology foresight for Slovakia; 2) Preaccession strategy of Slovakia will need some visions (membership, or non-membership, etc.). Already in 1997, the Institute for Forecasting Slovak Academy of Sciences has started a project: "Structural Changes in the Decisive Spheres of Slovak Society in Long-term Perspective" up to the year 2015, using the methodology and scope inspired from forecasting practice from the Czech Republic and Hungary.

In Yugoslavia after October 2000 political change has occurred and there are now a process of transition. It is early to say whether extensive and profound futures research will re-emerge (see R. Nakarada).

The luckiest situation for futures studies and researchers was and continues to be in Hungary. They have been no inhibited, nor forbidden. The futures research programs were (in 1960-1990) and are supported new by the Hungarian Scientific Research Fund, having very rich university curricula. The future orientation of population has become more active in the period of transition, but changed the accent of it. They are interested mainly in their own and their family's future and after that in the future of the country, but even so, only in the 1-10 years term. The future orientation of population or different social, economic actors are

accepted in forecasting and drawing up alternative futures images (see E. Nováky: "Futures Studies in Hungary" in this book).

Finally, one may *concisely conclude* that in the period of the years 1960-1990 and 1990 till now futures studies, research programs and concerns, *determined by* numerous *different factors* reveals a *waving trend*:

Years Interest of futures and futures studies

The sixties: *increasing*The seventies: *decreasing, stagnation*

The eighties: increasing

The nineties: decreasing, stagnation Around 2000: hopefully increasing

In last decade, the mentioned new set of problems stringently claim new, appropriate approaches.

Nowadays, future is more multi-fold than ever before. The "possible futures" give researchers far more possibilities than those working inside planning ever had. It is really a great chance. On the base of this chance the futures researchers might reborn like Phoenix in the region considered.

Q6. In our opinions special attention should be paid to the role of the youth in forming the forthcoming future. We would like to know the situation of the youth in the countries forming our common future therefore we thought to raise some questions connected to have an overall picture from the countries involved

a) In your experience are the youth of today interested in their future short term (1 year), medium term (5 years) and long-term (10 and more years)

If yes, name the fields and reasons,

If not, please, indicate no more than 5 reasons.

b) Is futures research taught in your country?

If yes, at what levels in which fields, in which institutes, and since when.

If not, please, indicate why. If it existed before 1990, please indicate the place and the years.

c) Please, make suggestions, recommendations and additional notes to the questions listed above, if any.

a) To this delicate question although there are different answers one may detect some important similarities that could be synthesize by the succinct observation formulated in Polish answer. "Present day youth is less interested in the future than before 1989". Reasons are the same as in Q4.

Similarly with this observation the Romanian answer remarks that the youth are in general trapped by a short-term vision of "hic at nunc" for the reason of hedonism and "Carpe diem". In Russia there is general interest for the future including the youth, but as soon as information of concrete forecast is published, an "effect of future-phobia" appears. In Slovakia, the youth are interested in short term (one year) future, related to professional career, un/employment, and occasionally in five years perspective related to emigration, family, flat, etc. but their ten and more years interest is irrelevant. In Hungary the most important time span interested young people is 1-10 years. The main reason for it is the fact that material values and success determines the ways of thoughts of the youth. Even if nowadays a lot of young people have got decision making position in every places of the life. In Yugoslavia youth felt deprived by the normal life, normal communication with their counterparts in Europe. Their future is related to their personal lives' immediate betterment. No collective concerns, no great visions are attractive. Their vision of the future is to become part of the western consuming society, to the external EU. However, keeping up with the high-tech developments, particularly in information sciences is important, as well as ecological concerns. Ecological concerns have gone particularly after the NATO bombing and

the use of deplated uranium. It will take some dwelling in relative normal circumstances before their creative, visionary is rekindled.

As a personal remark: under all these answers based on a certain reality I can not help yet to suspect a sort of eternal snarl of the olds versus unguided young people in a too fast changing, not easy intelligible world.

There is an interesting Romanian remark having, perhaps, a largest validity: in spite of hedonistic, "hic et nunc" attitude the youth interest in a rewarding profession and a competitive job move them increasingly towards at least a medium term vision. The argument for it is the increasing interest in professional training especially in universities, manifested in the fact, that in 1990 in Romania, there were over 90 students to 10 000 inhabitants and nowadays their number is doubled.

b) The answers are indicated very *different situations*. There are no answers from the Czech Republic, and only partial answers from Estonia and Yugoslavia.

In Estonia the only case of futures studies training in universities is a short course in Tallinn Pedagogical Institute, and the Institute of Geography of Tartu University is starting something like "Modern strategic planning" course.

In Poland futures research is not taught at the universities nor at scientific institutes. A conversation group on forecasting methodology was maintained until 1989. It was cancelled after 1989 due to the absence of sufficient number people interested in it. To the question "How do you see the possibility of involving new institutes into futures education or other training form in your country in the near future?" The answer considers that due to financial limitations there is no sufficient basis for expanding the future education in the nearest future.

In Yugoslavia after the fall of Dubrovnik Inter-University Post-graduate Centre that offered for several years, courses in futures studies, nowadays, other than public lectures, and sporadic courses at some faculties, no systematic studies of future in established within the Yugoslav educative system.

Comparatively with the above mentioned situation which in futures studies are not taught systematically in the educational system, in other countries the picture shows other aspects:

In Hungary futures studies are practiced in many universities as well as till and until 1989. Such, some universities taught futures research related to economic, medical, technical etc. aspects, in Budapest University of Economic Sciences and Public Administration, in Technical University at Budapest, in Semmelweiss University of Medical Sciences, in universities of different cities like Pécs, Miskolc, Sopron. The biennial International Futures Course is organised in Budapest also in 1999 and 2001 having an interesting curricula, as a reedited continuation of the Dubrovnik Futures Courses.

In Romania forecasting studies can be found in the curricula of Faculties and chairs of economics at the Academy of Economic Sciences of Bucarest (Faculty of Cybernetics, Statistics, Economic Informatics); in sociology at the Universities of Cluj-Napoca and Iassy; in technology at many Faculties of the University "Polytechnica" of Bucharest. They are also present in other faculties (demography, epidemiology) and natural sciences (geology and mineral resources). Likewise, most economic, management and engineering faculties include Econometrics and forecasting courses. As well as in the curricula of numerous private faculties include future methods.

In Slovakia, futures research is taught at Comenius University (Bratislava), University of Economics (Bratislava), University of Matej Bel (Banska Bystrica) and since 1998 there are doctoral PhD studies at the Institute for foreaasting (Bratislava).

In Russia there were and are future oriented courses and seminars in Universities in Moscow, Kiev, St. Petersburg, etc. But the Russian answer mentions in the synthesis that it is necessary to tell some words about a quality of the futures research next generation, i.e. about relation to the future of today students in Russia.

In principle it is quite the same as of all population: curiosity quickly passing in indifference. The curiosity, because always is interesting to find out something "about the future". Indifference, because the study of the future, as well as of the past, does not give any practical results for the present, and will not be claimed attention by a society. Besides has an effect the *presentism* of ordinary consciousness mentioned above. It is also important the discredit of forecasting focussed on divination because of nearly always appeared insolvent. And during the last ten years to all this is added in Russia the total demoralisation of population in general and of the youth in particular. For the prospects without any forecasts open most gloomy.

That is why attempts to adjust the teaching of technological forecasting as a special educational subject at the university from the end of 60s till nowadays invariable suffered failure. Sometimes at that of other university it was possible on any time to create even chairs of forecasting (such chairs were available in Moscow, Leningrad, Novosibirsk, Kiev, Sverdlovsk, Alma-Ata), but it earlier or later should be closed, as there was an insoluble problem of students specialisation and then employment. It was said, that futures studies are interdisciplinary on the character, but Soviet science and teaching are strictly mono-disciplinary in principle. Some enthusiasts managed by years to read lectures and lead seminars of forecasting at several faculties of several universities (at the Moscow University, for example, such lectures and seminars are taken place since 1969 till now), but it is of course not obligatory courses, facultative for wishing only. As the manuals there are used till now some text books of 70-80s and "Handbook of Forecasting" (1982).

The similar situation has developed with PhD (candidate of science in Russia) and DSc dissertations "on forecasting" 1967-99. But as well as in monographs you will vainly search here even for one concrete forecast. Even a dissertation "on forecasting methodology" is a desperately courageous step connected to raise risk not to receive the necessary majority votes of the scientific council members. Thus nearly each tenth DSc dissertation "on forecasting" was declined by dogmatic in such councils. And to try to give concrete forecast in your dissertation means obviously to go on scandals and failure. And for what? From nearly a hundred and half of the formal or informal post-graduate students only two young ladies (now not so young) continued to be engaged in forecasting, and that only as university professors, one or two later even as dean and rector. Others have found to themselves more profitable employment, claimed by the states and society.

This sad situation is beginning gradually to be improved only since the middle of 90s, when nearly annually "Summer schools of young futurists" has taken place with some dozens students, postgraduates and young fellows of several universities. Since 1997 in new created Russian Futures Studies Academy a special section for young futurists improvers is organised, though really functioning only in Northwest department of the Academy (St. Petersburg). Here we see a good perspective for summer and winter schools of young futurists on the more regular base. On something greater in the foreseeable future hardly it is possible to expect.

c) Suggestions and recommendations. In their kind and generous contributions to the issue after three years of efforts of this book our colleagues formulates some thoughts, considering that for the development of futures research and a future orientation sensibility:

A particular attention should be devoted to the popularisation of futures studies among the young generation (Poland); more popular books, articles, TV reports about the future and futurists adopted to mass consciousness and to organise future oriented special teaching courses in universities (Russia);

To introduce futures studies at secondary school level for developing the future orientation of the common people and also on postgraduate level at the universities, because dealing with the future of communities is a profession (Hungary);

To attentively take under consideration the informational society, its new technologies influences, and to prepare the society for it;

To professionalize the futures research, to make it recognized as an independent profession and to find out relations with different universities disciplines for make the futures oriented capacities part of any universities education.

To elaborate PhD programs in futures research.

To study the new paradigms in futures research methodology (Hungary).

A fundamental broadening of the international exchange of information on the results of futures studies and research in the particular countries and the international comparative analysis are necessary. To develop co-operation with ex socialist countries in the field of scientific projects and the education. It would purposeful to create a European Centre for futures studies (Poland, Hungary).

3. Final considerations

The results of research effort may add to the clear outlining of the historical fact that without the contribution of this interesting, vigorous and original part of Europe, the European culture would be poorer, while "Europe" would not be "whole".

Even if nowadays one can see in the considered countries, as well as world-wide some gap, some *delay* in futures studies approaches on the new challenges of the globalization process.

EPILOGUE INSTEAD OF CONCLUSIONS

Viorica Ramba Varga

The futures research (futures studies) has started in the second part of the 20th century, the bloodiest, violentest and most intolerant century.

The post-second war period was intensively *future-obsessive* in Europe. For mainly two reasons: one of them was caused by the geneal aspire to a peaceful world. Another was generated by the huge more and more accelerated scientific and technological development and its real/potential implication on society.

The end of the WW2 gave a rise to a *historical optimism* that impregnated the European mental, sentimental and comportamental structures. The future was perceived as the time/space bearing hopes and wishes for a better, peaceful, fraternal and free world.

By the end of the after-war reconstrution period, at the beginning of the 60s, the future has strongly installed in the current preoccupations.

In Western Europe, it was especially the explorative researches versus "possible futures" (B. Jouvenel) connected to the rapidly progressed science and technological development that generated the double attitude of the technological optimism and already the technological pessimism.

In Central and Eastern European socialist countries it was manifested mainly as future-oriented, interconnected explorative-normative-operative phases that subordinated the explorative studies to the centralised planning. The planning was aiming to attend an accelerated higher development for the countries considered. The prognostics in these countries marked by the spirit of the historical and technological optimism presented a sort of planning euphoria of that age. All these have been used up by the reality in the first part of the 90s. But the memory and the advices of these cultural-historical experiences deserve to be considered.

From the blood-soaked ground of the WW2 sprang the rationalist-humanist-enlightened spirit of the first post-war futures research. It *tacitly excluded* from its approach the *political-ideological criteria*, it practiced human *solidarity* and focussed on *criticism* against any jeopardy to the future of the *entire mankind*.

This trend's spirit bred a new cultural phenomenon in the Cold War decades. The phenomenon's originality was revealed in the emergence of a *specific state of mind* within the WFSF. This specificity stemmed from the fact that inside it such rational-emotional elements were amalgamated, in various dosages, as:

The criticism of Western researchers towards the "establishment";

The implicit (seldom explicit) non-conformism of researchers in the former socialist countries as to the centralized uniqueness of the socialist planning, as well as the acceptance of Bertrand de Jouvenel's idea of "possible futures";

Establishing rationalist-humanist friendships between researchers from different social systems, even at the risk of unpleasant consequences in their countries of origin recorded in many cases;

the research and debates of these generous humanists on mankind's future were conducted outside commercial/financial criteria and of the state's intervention.

This was the way and the state of mind in which the 1960-1990 generation of futures researchers scanned the roots that events stemmed from. It is this generation's precious cultural acquisition.

Why is a history, written from the inside, of futures research in Central and Eastern European countries in the period 1960-1990 and 1990-2000 of interest, as part of the postwar European culture?

There is no univocal response, but several hypotheses may be proposed that could work as adequate answers. One would be that *in reality* the centralized State "socialism" (up to 1990) was an economic development strategy based on the Western model of *modernization by classic industrial revolution*, a strategy "clothed" in a different ideological "frock".

Elements of the industrial civilization code could support the hypothesis, such as: standardization (mass production), specialization, synchronization, concentration, maximization, centralization. They were used both in the socialist East and in the liberal West, regardless of the dominant ideology and/or the modernizing social-political forces. Along with these elements, the modernization code included the usage of powerful and "tough" technologies: material-intensive (large), energy-consuming, cost-intensive and polluting. Massification of the media and the uniforming mass education contributed to spreading the basic concept of industrial civilization, identifying the idea of exponential, quantifiable, economic growth with the principle of progress. In both systems.

From a cultural perspective, another likeness may be noted, concerning an aspect pertaining to the history of the futures research *uncertainty*, regardless of the social-politic system. We will only note two similarities:

although the socialist state redistribution society promoted *planned research and programming* while the futures research institutes were state-funded, the collapse was not foreseen;

the similarity with the "mishap" of the futures research institutes in the West, who did not foresee the first major oil crisis (1973-74), nor the "domino effect" in 1989 is striking.

Despite of the uncertainty of futures researches one may affirm the *certainty of the need to revive and deepen futures researches world-wide*, at least in the following aspects: evidence of local-global connections and balancing the forces of globalization and localization; the transition to a new post-industrial civilisation and its implications; the law and ethical aspects of the new, astonishing evolution of the science, especially of genetics and bioengineering; the centralization and decentralization of connections, as well as those of diversification and standardization that appear in the context of the technology revolution in IT and communications; connections poverty-wealth; natural-artificial and so forth.

Such new set of problems - much vaster than the aspects mentioned above - is now *felt* as a *profanely* inspired *millennarism* that impregnates the spirituality of the second millennium's end in a *different* fashion than the *religious millennarism* that dominated the end of the first millennium. The profane millennarism as a dimension of today's spirituality claims to observe humankind at its essential turn-points. This millennarist pulsation responds to an intellectual and also an "existentialist" need and it expresses a truth. Such established, felt or fathomed *truth* draws attention on the fact that we participate in an ample *mutation* at the end of which things will never again be exactly as they used to be.

And how will they be? The possible answers should be approximated through new futures studies, which will be *different* from the ones up to 1990.

Who should carry through researching the future of the aspects in the new problems set that, in point of fact, pertain to "palpating", grasping, diagnosing the essence of the unfolding new civilization at the passage from the "old" into the "new" millennium?

The question is less naive than it seems. It deliberately ignores the political and economic bodies having precise interests. Equally, it supposes that numerous institutes, NGOs, specialized journals that have focused their attention over the years on futures research, would continue to do so. One may hope they will do it with a larger public accessibility and clearer democratic transparency than up to now.

The question points to youth. A "change of guard" is taking place within the considered countries. Just a few futures oriented aged thinkers are acting now. Fortunately the young catch up.

What should we convey to our young at the outset of the new millennium, from the intellectual abilities and cultural sensitivities accumulated over time, so that the cultural diversity, not exclusively focused on Western conformity, should not be annihilated, but rather harmonized? What and how should we tell our children from the common heritage, so that it becomes a basis for continuing the civilization's survival relay? What should we convey to convince them that man is more spirit than body, more and other than just belly and sex, other than "hic et nunc"?

The hypothesis that might act as valid answer is *respecting the diversity of life* and exercising *human solidarity*. Even though it may seem utopian in the new context of globalization and re-polarization. Beyond its possible utopian shade, remains the obvious fact that the set of queries/reflections above encompasses the hard core of the cultural challenge of the new millennium and of its new civilization. Let us face it together. Although futures research may now seem like a blind man in a dark room looking for a black cat that is not there, we must still go on. We have no other "Globe".

ANNEX: THE QUESTIONNAIRE

In this *questionnaire* we brought together the questions and topics that would facilitate our work in compiling the studies and writing the planned book, and not less to make them internationally comparable.

These questions and topics listed below we thought to deal with among others are:

What institute(s) in your country

did effect futures studies, research programs in the years 1960-1990, are effecting now? (The name of institute, city etc.)

The most important fields of futures research programs in your country between 1960-1990.

since 1990 (today). E.g. social, educational, health care, economic, cultural, political, technological, environmental, and others.

Please indicate 3-6 more important futures studies concerning the futures of the fields mentioned above

of your home country,

of global interest - written and published in your country, with bibliography.

Please explain whether a significant change was seen in the period of transition on the future orientation of the population and even in the fields of futures studies activities.

If there was progress, name the fields,

If accidentally the interest and activities declined please, indicate the probable reasons, like the lack of interest of decision makers, the lack of global vision about future importance of the different fields of human activities, loss of people's interest in a longer than one year futures perspective, other(s).

In your feelings the futures studies in your country will tend to revive in the near future and the millennium? In both cases: yes or no, please indicate why.

In our opinions special attention should be paid to the role of the youth in forming the forthcoming future. We would like to know the situation of the youth in the countries forming our common future therefore we thought to raise some questions connected to have an overall picture from the countries involved.

In your experience are the youth of today interested in their future a) short term (1 year), b), medium term (5 years) and c) long-term (10 and more years).

If yes, name the fields and reasons,

If not, please, indicate no more than 5 reasons.

Is futures research taught in your country?

If yes, at what levels in which fields, in which institutes, and since when.

If not, please, indicate why. If it existed before 1990, please indicate the place and the years.

c) Please, make suggestions, recommendations and additional notes to the questions listed above, if any.

Thank you for your kind cooperation.

Endnotes

- 1 Despite the GDR had adopted formally a kind of multi-party system, we will throughout this paper use the word "party" only with reference to the SED Sozialistische Einheitspartei Deutschlands (United Socialist Party of Germany).
- 2 On that session, Walter Ulbricht underlined that the working classes and the party had the task "to elaborate and to use the Marxist-Leninist societal prognostics to an extent not known before." (Ulbricht 1967, p. 92)
- 3 Only some years later Klaus had to apologize: Cybernetics could never be a universal theory of society.
- 4 The Council of Ministers was formally the government of the GDR, actually all executive powers were concentrated in the hands of the politbureau of the SED.
- 5 In 1970 e.g. the newspaper of the communist youth organization "Junge Welt" organized a competition among its readers to the question "What will you do on Thursday, January 6, 2000?" Famous scientists contributed materials on technological and social prospects. The winners were invited to participate in a banquet on January 8, 2000 which really took place. Comp. Steinmüller 1999
- 6 When the Brundtland Report "Our Common Future" appeared 1988, it was highly discussed in the Academy of Sciences as well as on conferences of the Evangelic Academies, in the East German Writers' Union and last not least in the oppositional Umweltbibliothek (Library for Environmental Problems).
- 7 "Futures studies in Poland in the works of the Futures Studies Committee 'Poland in the 21st century' The Committee and its creators 1969-1999 (on the 30th anniversary of the Committee's founding)", Elipsa, Warsaw, 1999
- 8 See: "Action Plan for Economic Structure Reform", Industrial Policy Bureau MITI, Tokyo, March 1998
 - 9 Its full text was not published until 2000 in "Bulletin Poland 2000 Plus" 1/2000
 - 10 Andrzej Krzysztof Wroblewski: "The poverty of prognoses", Polityka 4/1997
 - 11 Witold Pawlowski: "A prognosis cut short", Polityka 1/2001
- 12 Maciej Rybinski: "Under the charm of false prophets", Rzeczpospolita, Dec. 30, 2000-Jan. 01, 2001
- 13 "About the need for strategic concept of the development of Poland and the role of science in the restructuring of the economy", Committee Report, ELIPSA, Warsaw 1993 and "Is it worthwhile to think about the future", ELIPSA, Warsaw, 1993
- 14 Józef Pajestka: "Civilisational megatrends vs. the process of system transformation". In: For the orientation on the future in Polish reforms", ELIPSA, Warsaw, 1994
- 15 "In the perspective of the year 2010 The road to 2010", Futures Studies Committee "Poland in the 21st century", ELIPSA, Warsaw, 1995
 - 16 "Strategia rozwoju Polski do roku 2020. Synteza", ELIPSA, Warsaw, 2000
 - 17 "Strategy for Poland's development up to the year 2020", see above.
- 18 See: Johan Galtung: "The world in economic crisis", Bulletin "Poland 2000 Plus" 1/2000
- 19 "Poland 2025 long-term strategy for development", published by the Governmental Center for Strategic Studies, Warsaw, May 2000
- 20 "The perspectives of the advanced fields of science and technology until 2010", ELIPSA, Warsaw, 1999
 - 21 For a more detailed discussion, see, Sarmir, E., 1998, pp. 22-27.