

NEWSLETTER

EDITED AND PREPARED BY THE SECRETARIAT P.O. Box 6710-S-11385 Stockholm, Sweden

March 1981

EDITORIAL

In starting my work as President of WFSF I wish to thank my predecessors with whom I have worked closely and in the same direction. Mahdi Elmandjra has inspired many of WFSF's activities and debates enlarging its scopes and aims. Johan Galtung has affirmed the possibility of an independent forum where futures can be debated from different points of view. I hope to continue and build on both their work and inspiration living up to what they have done for WFSF. I wish most particularly to hope that Mahdi Elmandjra will continue to cooperate and assist us with his advice and creativity.

1980 has been a hard year for WFSF: the cancellation of the meeting in India prepared for two years and the postponement of the General Assembly, brought many organizational problems and not only organizational. At the same time, with them, it brought a period of reflexion on different questions which arise in an organization that first of all is an NGO and secondarily has grown in the last years just because of its transparency.

I regret the consequences which such circumstances have caused in the form of disappointment or even inconveniences to many members of WFSF and at the same time I

wish to say that the members of WFSF have understood the extraordinary circumstances and have reacted with sense of cooperation and understanding and I wish to thank them all for this and for their trust.

I look forward to working with Göran Bäckstrand as Secretary General and I look with hope to the coming phase of WFSF life.

The Newsletter, after a period of silence starts again from Stockholm and will keep up its functions as clearing house just as before so I hope you will send all your information to the address of the Secretariat in Stockholm. It will continue to be the link between members of WFSF and people interested in futures studies.

During 1981 WFSF is planning regional meetings. In the Netherlands at the end of October also with the participation of a few members from other continents. It will carry out in the Spring the already planned meeting in Mexico in cooperation with CEESTEM and UN University, while it is exploring the approved possibilities of a regional meeting in Sri Lanka and Ivory Coast. We wish to carry out during such meetings a line of thinking which will, in different ways, develop during the regional meetings and build up the content of the World Conference which will be held in Sweden in 1982.

You will of course receive all detailed information.

Looking forward, with your help, to the development of WFSF and Futures Studies.

Eleonora Masini

SOME PERSONAL - AND SOME PRACTICAL - WORDS FROM THE EDITOR

WFSF - a young organization with a lot of knowledge and experiences available among its members. It is my duty - and pleasure - to serve this exchange, a free flow of ideas and information among yourselves.

WFSF has individuals and organizations as members, geographically representing most parts of the world. Some of us are suffering of information overload, having problems to establish filters or grids in order to find out the important messages in a media-conscious world. Some of us have difficulties in getting any relevant information at all, publications and books being costly or difficult to get because of different practical obstacles.

Being in charge of this Newsletter, I want you to know that I am open for your proposals in order to make it better serve your needs. Thus, I would welcome your communications as to how you want your Newsletter. As before, this means an uninterrupted flow of announcements to me intended for the Newsletter. In order to make the Newsletter truly global it is particularly needed to have a more close collaboration with members being geographically far away from the secretariat, i.e. in the Third World. I would however also urge you to indicate in which directions you would like to see the Newsletter develop. As an experiment I am in this issue giving you the content of some more known futures studies journals. Would such a service be of some interest to you?

I have also a few practical remarks to make.

The Newsletter is distributed to members and to quite a number of interested organizations and persons. The

distribution to non-members cannot any longer be done without asking for a small contribution. Non-members are therefore requested to pay \$20 US for the Newsletter, which I will try to distribute four times a year. (The frequency also depending on the members' own wishes and communications to me).

The second practical announcement: The proceedings of the Vith World Conference of Futures Studies in Cairo have been printed in Bucharest. I expect the books to arrive in Stockholm shortly and I urge all members of the federation to buy these proceedings in order to cover the printing costs (about \$3,000 US). Please send an order of the proceedings to Stockholm at the same time as you transmit your membership fee. The book costs \$10 US.

Göran Bäckstrand

CONTENT

	Page
Report of WFSF Council	5
All About Members and the Secretariat Organizations	16
Activities	17
Meetings	24
Courses	30
Publications	41
Billboard	46
	68

REPORT OF WFSF COUNCIL

REPORT OF MEETING WITH THE COUNCIL OF WORLD FUTURES STUDIES FEDERATION IN SAINT VINCENT, ITALY, JANUARY 21 - 22, 1981.

The meeting was chaired by WFSF president, Mahdi Elmandjra. The proposed agenda of the council meeting was accepted.

Council members and Italian members present:

Uvais Ahamed, Anna Anfossi, Anna Arista, Göran Bäckstrand, Franco Bernstein, Andrea Bottai, Anna Coen, Mahdi Elmandjra, Eleonora Masini, Aurelio Peccei, Raimondo Strassoldo, Sergio Urru, Roberto Vacca, Bart van Steenbergen.

1. Items related with election of new WFSF officers and transition of Secretariat and Presidency.

The president announced the results of the per capsulam vote with WFSF members concerning the election of a new president and a new secretary general. *)

Votes expressed: 157

Votes valid: 156

Votes in favour of Eleonora Masini as president: 155

Votes against -

Votes in favour of Göran Bäckstrand as secretary general: 148

Votes Against -

Abstentions: 1

The Council took thus note of the election of Eleonora Masini as President and of Göran Bäckstrand as Secretary General. The Council decided that the changes of presidency and of the secretary general shall take effect on March 1, 1981.

*) These numbers are an updating of those given in letter by Mahdi Elmandjra.

REPORT OF WFSF COUNCIL

Aurelio Peccei and Eleonora Masini expressed the deep gratitude of all members towards the outgoing president. It was in particular stressed the importance of Mahdi Elmandjras continuous efforts to make the federation a real world-wide organization. His advice was very much needed also during the coming years.

Bart van Steenbergen paid tribute to Eleonora Masini and her long, personal involvement with the federation. "She was the mother of WFSF".

2. Report by the President

The president communicated some reflections on the need for Non-Governmental Organizations (NGO) in general - and in particular the need for WFSF!

Richness will in the future be to preserve a certain form of mobility. "We ought to be ready on call." This disponibility is required not only on the individual but also on an institutional level.

The system of international organizations is now concentrated to its own survival. Half of all energy is devoted to this fight.

In comparison with international governmental organizations the NGO embodied creativity in international relations. Nation states and parliamentary organizations are questioned. The only hope is that NGO's will help to create another structure. WFSF can make a good contribution.

The financing of WFSF remains a great problem but the federation must continue to be an autonomous unit, free from any pressures as a consequence of financial dependence on any single source of income.

Within the family of futurists prevails a generous atmosphere which has to be husbanded and cared for.

It was of particular encouragement to note the rapid development of the idea of futures studies within the African region. People are today troubled and anxious. There are those who exploit the anxiety, others are working jointly with the WFSF in order to increase know-

REPORT OF WFSF COUNCIL

ledge and understanding.

3. Report by the Secretary General

Eleonora Masini presented an account of WFSF activities from September 1978 till December 1980. See Annex 1.

The Council took particular care in discussing the events that led to the decision to postpone the VIIth World Conference. The Council reconfirmed the actions taken by the President and the Secretary General. The Council expressed the hope that a conference within the framework of WFSF activities could take place in India later at an appropriate time. The Council made the observation that in the case of India as in all similar situations the WFSF organizing counterpart was always its members or committees created on behalf of these members.

4. Future meetings

General Assembly and World Conference

Duly taking into consideration

- the transition difficulties in connection with the transfer of WFSF offices
- the need for ample time in order to organize a World Conference
- the need for members to have time to get travel grants etc

the Council decided that the next General Assembly and the World Conference shall take place in 1982.

The Council discussed different choices for a meeting place. Taking into account the time constraints concerning several suggestions the Council expressed the wish that the new Secretary General should explore the possibility of the Swedish members hosting the conference in 1982 in Stockholm. The topic for next World Conference would be the same as the one planned for the New Delhi meeting, i.e. "The future of government and political institutions".

REPORT OF WFSF COUNCIL

Regional meetings

The Council decided to urge its members to arrange and participate in regional meetings as part of the preparations for the World Conference. The Council also authorized the President and Secretary General to explore the possibilities of regional meetings.

The president informed the meeting of the possibility of a regional meeting in Abidjan. Members from the Ivory Coast were expected to give an firm answer shortly.

Uvais Ahamed introduced the possibility of a regional meeting arranged by the Sarvodaya movement in Sri Lanka in cooperation with Sri Lanka's members. This proposal should further be explored with the president of Sarvodaya.

A further regional meeting in Europe would if possible be organized. Talks should be initiated with professor Pieter Baehr, executive director at the Netherlands Council on Government Policy.

Finally, in connection with WFSF/CEESTEM/UNU-GPID project and meeting in Mexico city on Visions of Desirable Societies, April 1981, it should be looked for possibilities to discuss the World Conference topic at regional meetings in the Americas or at least to discuss the topic briefly at the Mexico meeting itself.

A further WFSF regional meeting has been announced by Ionitza Oltenau. It is a Round Table Conference on History of Philosophy of Science to be organized in Bucharest in 1981.

Other meetings

1981 is the International Year for Disabled Persons. United Nations will undertake several manifestations concerning this topic. At the end of July an International Seminar will take place in Buenos Aires. Preparations for this seminar are under way with participation from "Rehabilitation International", an international society for rehabilitation of the disabled. The Council took note of the possibilities of a symposium in the connection on "The future of disability Pre-

REPORT OF WFSF COUNCIL

vention and rehabilitation" under the joint sponsorship of WFSF and Rehabilitation International.

General Policy Principles of WFSF

The Council confirmed or elaborated the following principles that ought to guide the work of the federation.

Conferences/Meetings

The WFSF counterparts are in all arrangements members in the different countries concerned, in no circumstances the governments directly. The members can either be individual ones or organizations.

Membership

It is continuously of great interest to the federation to enlarge its membership in order to be even more representative on a world level.

Membership should be encourage both on individual and institutional level. The Council recommended that on world regional level a special WFSF antenna in each region should be looked for in order to get into a closer cooperation with the secretariat.

The Credential Committee should be rediscussed in its functions.

Topics for conferences/futures studies

Bart van Steenberghe made the following analysis of futures studies evolution during the 70'ies.

The world witnessed a shift from interest in technology/economics/physical borders into value/lifestyles/culture. Are futures studies now addressing more directly political dilemmas, crisis of democracy, the future of political institutions? The forthcoming World Conference could become an important event.

Research/Courses on futures studies

The Council agreed on the necessity not to focus blindly on increasing worldwide membership, i.e. the pure organizational approach to

REPORT OF WFSF COUNCIL

get more members. WFSF efforts must as before also be a continuous concern for promoting research of good quality. This goal was mainly to be reached by acting as a clearing-house on what research is going on.

The courses committee had to be revitalized. The problem was not so much getting the good teachers but how to get the students to come i.e. to Dubrovnik with its particularly good facilities.

The Council took note of the possibility of WFSF participation in a summer course organized by Johan Galtung in Alicante, Spain.

The second point to be brought up - coordination of research - was a much more delicate one, where no answers were found.

Finally research undertaken by WFSF should not be excluded but depended on direct proposals by the members. The two experiences so far had been rather well executed and met with considerable interest.

The most interesting project under way was the planned manual for futures studies (Manuel pour la prospective) to be executed by WFSF and some other participants. The project is financed by UNDP/Economic Commission for Africa.

Newsletter

The German Institute for Futures Studies had offered a joint production of the Newsletter and the "Analysis and Prognosis" in Berlin. The Council decided to defer further action until the next Council meeting in order to let the new Secretary General make an evaluation of the situation concerning the editing and production of the Newsletter.

Budgeting questions

1978 Income: 5 456 \$ Expenses 9 019 \$ Deficit 3 563 \$
Not calculating 3 978 \$ paid by E. Masini for telephone and Newsletter.

1979 Income: 11 166 \$ Expenses 10 438 \$ Balance 728 \$
Not calculating 5 428 \$ paid by E. Masini for telephone and Newsl.

REPORT OF WFSF COUNCIL

1980 Income 17 290 \$ Expenses 16 480 \$ Balance 810 \$
Not calculating 1 050 \$ paid by E. Masini for telephone.

The Council decided that this year's balance 810 \$ should be used for covering telephone costs of 1 050 \$ paid by Eleonora Masini.

In order to pay for costs to entertain a WFSF office in Rome the Council decided that 4 000 \$ of membership fees due for 1981 should be transferred to WFSF account in Rome.

The Council confirmed membership fees, i.e. 30 \$ for individuals, 200 \$ for organizations.

Other questions

Frank Feather, Canada, had invited WFSF to become a member of a new venture called "The Global Network". As there were disagreement as to the present status of the project Eleonora Masini was charged by the Council to ask for more information about this undertaking.

Göran Bäckstrand

REPORT OF WFSF COUNCIL

REPORT BY SECRETARY GENERAL

September 1978 - December 1980

1) Activities from September 1978 to December 1980

A) WFSF Members

- a) 300 Individuals members (235 in 1978, 182 in 1977)
- b) 42 Organizations members (34 in 1978, 22 in 1977)
- c) 58 Individuals representing Organizations (43 - 1978, 34 -1977)
- d) 52 Countries represented (43 in 1978, 34 in 1977)

B) Meetings of the Executive Board

- 7th May 1979, Berlin, during the meeting "Science and Technology and the Future"
- 29th July 1980, Toronto, during the "First Global Conference on the Future"
- 7th June 1979, informal Council Meeting, Salzburg, during the Club of Rome Meeting.

C) Meeting of Members

- 9th May 1979, informal meeting of WFSF, Berlin, during the conference "Science and Technology and the Future"
- 21st January 1980 informal meeting of WFSF members, Dakar, during the conference of the Association Internationale de Perspective Sociale
- 2nd June 1980, Grzegorzewice (Warsaw), in cooperation with Poland 2000, for the Eastern European members
- 23rd July 1980, Toronto, during the "First Global Conference on the Future"
- 18th June 1979, Bucharest meeting of the International Scientific Council of the International Center of Methodology for Future and Development Studies

D) Secretariat Activities

a) Related to Council

- December 1978, announcement of John Mc Hale's death and proposal of Magda Mc Hale as Vice President
- March 1979, announcement of Council meeting in Berlin, May 1979
- May 1979, report of Council meeting held in Berlin, May -79
- June 1979, report of meeting of International Council of Bucharest Center

ANNEX 1

REPORT OF WFSF COUNCIL

- June 1979, report of informal meeting held in Salzburg during the Club of Rome meeting
 - Letter on presence of Council members at UNCSTED in Vienna 1979
 - January 1980, report of the informal meeting of WFSF members held in Dakar
 - January 1980, letter by and to Hans Buchholz on finances of Berlin meeting
 - June 1980, report of meeting held in Grzegorzewice (Warsaw)
 - June 1980, announcement of meeting of Council and WFSF members in Toronto during the "First Global Conference on the Future"
 - September 1980, report of meeting of Council and WFSF members in Toronto
 - September 1980, letter by Göran Bäckstrand on proposal of Secretariat in Sweden
 - September 1980, letter of Mr. Parthasarathi and letter Secretariat
 - November 1980, letter of Mr. Parthasarathi and letter Secretariat
 - November 1980, announcement of Council meeting in Saint Vincent, January 1981
 - January 1981, details and two basic documents for discussion for Council meeting in Saint Vincent, January 1981.
- ##### b) Related to members
- October 1978, minutes of General Assembly held in Cairo
 - December 1978, reminder of membership fee
 - April 1979, second reminder of membership fee
 - May 1979, report of informal meeting of members during Berlin meeting, May 1979
 - November 1979, letter on Toronto meeting to be held July 1980
 - January 1980, reminder of membership fee
 - March 1980, announcement of meeting to be held in Grzegorzewice (Warsaw), June 1980
 - April 1980, announcement of meeting in Buffalo, USA, on "Approaches to the Study of the Future, USA, Canada, Mexico", 20-22 May 1980
 - September 1980, second reminder of membership fee
 - On India
 - June 1980, March 1980, July 1980, information letters and final programme with praxis for voting

REPORT OF WFSF COUNCIL

- September 1980, October 1980, information letters
- November 1980, letter by Mahdi Elmandjra with ballot
- c) Letters to participants in New Delhi Meeting
 - September 1980
 - Letter for possible proposal of meetings to various members
- E) General Information
 - a) Newsletter
 - October 1978, pages 47
 - December 1978, pages 67
 - March 1979, pages 53
 - September 1979, pages 56
 - November 1979, pages 63
 - February 1980, pages 39
 - May 1980, pages 59

Payment of the Newsletter was requested for non members in November 1980, 700 are sent out, about 150 replied to request of payment.

 - b) Individual contacts with members and prospective members: an average of 30 letters a month with members and about 100 a year with prospective members (letters of request of information about WFSF activities etc.)
 - c) Reports of meetings sent to various Journals in various languages.
 - d) Presentation of WFSF at various meetings
 - e) Proceedings of Cairo are ready to be distributed; 500 copies 3 000 Dollars but unfortunately WFSF has only paid 500 Dollars and is not now able to pay the 2 500 remaining
 - Proceedings of Bucharest 1972 could be published at the same conditions
 - Proceedings of Berlin conference have been distributed by GZ
 - Proceedings of Mexico meeting "Visions of Desirable Societies" 1978 have been distributed in Spanish, the English edition is in press.- F) Meetings
 - a) 4/10 May 1979, Berlin, "Science and Technology and the Future" in cooperation with GZ and DSE
 - b) 20/22 May 1979, Mexico City, "Visions of Desirable Societies", in cooperation with CEESTEM and UNU GPID Project
 - c) 20/22 May 1980, Buffalo USA, "Approaches to the Study of the Future, USA, Canada, Mexico", organized by Magda Mc Hale in cooperation with Center for Integrative Studies, School of Architecture and Environmental Design, State University of

REPORT OF WFSF COUNCIL

- New York, Buffalo, CEESTEM and the Canadian Institute for Economic Policy, Ottawa
- d) Grzegorzewice (Warsaw), 2 June 1980, in cooperation with Poland 2000
- e) The meeting to be held in Mexico City September 1980 in cooperation with CEESTEM, UNU GPID Project on "Visions of desirable societies" has been postponed to April 1981
- f) VII World Conference on Future Research in New Delhi, to be held in November 1980 has been postponed.
- G) Courses
 - a) Dubrovnik, February 1981, Futures Studies with
 - Milos Macura, Economic Institute, Belgrade
 - Mihailo Markovic, Belgrade
 - Radmila Nakarada, Belgrade
 - Bart van Steenberg, The Netherlands
 - b) Futures Studies Course in Alicante (Spain)
- H) Committees
 - a) The Ethics of Futures Studies coordinated by Suleiman Cohen, met in Minneapolis 1979
- I) Research
 - a) UNU Project "Goals, Processes and Indicators of Development", coordinated by Johan Galtung in which WFSF contributed with the subproject "Visions of Desirable Societies". The meeting on the same topic, will take place in April 1981. The proceedings of the 1978 meeting in Spanish are published, the English edition is in press and so are the 1979 proceedings in Spanish and English
 - b) UNESCO Project on "Forecasting Methodologies with specific reference to Education" has been prepared for UNESCO in 1979.
- J) Relations of WFSF with International Organizations: UNESCO, UNU, SID, ICSU, IDEP, ILO, UNITAR, are growing.

ALL ABOUT MEMBERS AND THE SECRETARIAT

NEW WSFS MEMBERS

Individuals:

- Anna Anfosi
- Allan Agard Evans
- Salah Galal
- Lane Jennings
- Martin van Putte
- A. Rahman
- Betty Reardon
- Kathleen Redd
- Fred Thompson
- Corso Fiume 11, Torino, Italy
Rte des Deux villages 1806,
St. Legier, Switzerland
Al Ahram, Al Galaa Street,
Cairo, Egypt
World Future Society, 4916 Elmo
Avenue, Washington, D.C. 20014,
USA
Java street 144-3, 1095 CK Amster-
dam, Holland
Center for Study of Science,
Technology and Development, Council
of Scientific and Industrial
Research, New Delhi 11001, India
I.W.O., 777 UN Plaza, New York,
N.Y. 10017, USA
St. Cloud State University,
St. Cloud, Minnesota, USA
737 A Springland Drive, Ottawa,
Ontario K1V 6L9, Canada

Organizations:

- Association Culturelle d'Asilala
- Banque Ouest Africaine de Developpement
- Tecnocasa Spa
- University of Houston
- Al Monhit, 12, rue Sidi Ben,
Merzok
BP 1172, Lome, Togo
Viale Lombardia 43, 67100 L'Aquila
Italy
Clear Lake City, 2700 Bay Area
Bd., Houston, Texas 77058, USA
Chairperson W. Markley

Secretariat

Anna Arista continues as before to assist Eleonora Masini in the Rome office. In the Stockholm office Ann Mari Schmidt is assisting in WSFS work. Margareta Grånäs was responsible for the production of this issue of the Newsletter.

ORGANIZATIONS

CENTRE FOR THE STUDY OF COMMUNICATION AND CULTURE

The Centre for the Study of Communication and Culture seeks to set in motion research and action on the human and moral problems of modern communication. The CSCC contribution to this goal is a number of services which facilitate work of researchers and others who are exploring possibilities for innovative uses of the media.

The services of the CSCC are international in scope. Initiated by the Jesuits in 1977, the CSCC reflects the concern of the Jesuit community in the First, Second and Third Worlds that radio, television and other forms of communications technology be a means for both spiritual growth and social development. Through its international advisory board, the CSCC incorporates a wide range of ecumenical, interdisciplinary and global perspectives in its policy and decision-making.

For further information:

221 Goldhurst Terrace, London NW6 3EP, England

FINNISH SOCIETY FOR FUTURES STUDIES

The Finnish Society for Futures Studies was founded on the 28th of May 1980 by fourteen Finnish universities. Now its members include 18 universities and a growing number of individuals - both scientists and other interested persons.

The purpose of the Society is

- 1) to promote Futures Studies in Finland, as well as the

ORGANIZATIONS

- application of Futures Studies and discussion based on Futures Studies, and to develop necessary material, organizational and intellectual resources;
- 2) to promote university teaching based on Futures Studies;
 - 3) to maintain connections among Finnish researchers and connections between them and the users of Futures Studies;
 - 4) to maintain connections with foreign research centers and researchers and to participate in international conferences and other activities;
 - 5) to inform researchers and the public about development in Futures Studies;
- and thus contribute to the development of the Finnish society and culture.

For further information:

Finnish Society for Futures Studies
c/o Turku School of Economics
SF-20500 TURKU 50
Finland

FUTURES STUDIES CENTER AT THE INSTITUTE OF NATIONAL PLANNING
IN CAIRO

Being aware of the importance of futures studies and their relevance to development and planning policies in Egypt and the Arab World, a "Futures Studies Group" was formed by the Institute of National Planning from a group of Egyptian thinkers under the supervision of Dr. Ibrahim Helmi Abdel Rahman. The main objective of the FSG is promoting and encouraging researches and studies in the field of futures studies.

The INP is also in the process of forming a Futures

ORGANIZATIONS

Studies Center to be one of the main scientific centers of the Institute.

Any help and cooperation in furnishing the Documentation Center with the studies, researches, conference papers issued in that field is welcome.

For further information:

Ahmed M. Eid,
Under-Secretary of State
Director, Documentation and Publishing Center
Institute of National Planning
Mahalah Salem St.
Nasr City-Cairo
Tel: 603166, 603235
Telex: 93261 IPLAN

THE INSTITUTE FOR RESEARCH ON PUBLIC POLICY - TECHNOLOGY
AND SOCIETY PROGRAM

The name of the program is changed from Future Studies Program to Technology and Society Program, to reflect better that we concentrate on technology related futures studies.

Our present three streams of studies deal with Information Technology, Biotechnology and Japan - Related International Technology Transfers.

We have just published Canadian Perspectives on Economic Relations with Japan. Two other books will soon be out. Women and the Chip deals with impacts of microelectronics on employment of women. The other report Biotechnology: Promises and Concerns is produced jointly with the Science Council of Canada.

ORGANIZATIONS

We have seven projects under way: Robotics, Japanese Computers, Use of Satellites for Managing Zones, Electronic Newspapers, Automatization in Municipal Government, Human Applications of Biotechnology and "Bureautique" Impacts on Structure of Organizations. Several other projects are currently under consideration, or awaiting funding.

For further information:

Zavis P. Zeman, Director
60 Queen Street, 12th floor
Ottawa, Ont.
K1P 5Y7 Canada
Tel: (613)238-2296

INTERNATIONAL FOUNDATION FOR THE COMMUNICATION OF CULTURE

The purpose of the Foundation is to develop and increase understanding between peoples of different cultures, through the broad dissemination and communication of all facets of their acts.

General operating principles

The Foundation shall operate as a not-for-profit organization, and shall promote the development of culture as set forth in its certificate of incorporation.

Beneficiaries of the Foundation

The FCCI shall promote culture through the provision of financial, technical or other assistance:

- o At their request, to UNESCO, the member states of UNESCO and its nongovernmental organizations or national agencies in educational, scientific and cultural fields

ORGANIZATIONS

To international, national, regional or local organizations, public, semi-public, or private or to individuals engaged in educational, scientific and cultural activities.

For further information:

International Foundation for the Communication of Culture
(F.C.C.I.)
10 Wall Street
New York, N.Y. 10005, USA
Paris
5 Av. Victor Hugo
75116 Paris
France

IRISH FUTURES SOCIETY

An Irish Futures Society has been formed and initially receiving active support from the National Board for Science and Technology.

For further information:

Mel Healy
National Board for Science and Technology
Shelbourne Road
Dublin 4, Ireland

SYSTEMS RESEARCH INSTITUTE (SRI), POONA, INDIA

was set up in 1974 as a non-profit centre of applied research to focus attention on problems of development in LDCs and to define alternative options and strategies for their solution.

The founders of SRI felt that the complexity of this

ORGANIZATIONS

situation in India and other LDCs require a broad System Approach, attuned to the dynamics of the situation. This requirement is reflected in the content of work programme at SRI connected with solving problems of public systems:

- (a) Development of multidisciplinary Systems Analysis methodologies;
- (b) Building Systems Design capabilities in government in India and other LDCs;
- (c) Development of Computer tools for Systems Modelling, Analysis, Simulation and Design; and
- (d) Research on Futures relating to the interaction of population growth, resource utilization, and satisfaction of Basic Needs.

SRI maintains professional communication links with other scholars and analysts and with decision-makers directly and also through a programme of publications, seminars, workshops and conferences. Its journal SACM (\$ 10 per year) is aimed at readers interested in the applications of System Analysis.

SRI has close association with International Organizations in the areas of Informatics and Systems Analysis such as IFIP, and IIASA. The Ford Foundation has lent SRI generous financial support in its work.

For further information contact:

Prof. J.G. Krishnayya
Systems Research Institute
17-A Gultekdi
Pune-411 009, India

UNIVERSITY FOR PEACE - Government of Costa Rica

The central idea of the proposal made by the govern-

ORGANIZATIONS

ment of Costa Rica consists of the establishment of a university that educates for peace. For this reason education for peace, or the making of individuals around the world with conscience for peace should be one of the basic objectives of every country, of all international organizations and of mass communication media.

For further information:

Presidential Commission on the University for Peace
San José, Costa Rica

ACTIVITIES

FIRST STEP - A Proposal for an International Campaign
Against First Strike Weapons

Introduction

This proposal calls for the organization of a three year international campaign to stop the production and deployment of first strike weapons*. First Step suggests the coupling of this first step toward disarmament with conversion of the resources saved to meet the continuing crisis of world hunger. The campaign would culminate, if necessary, in a major international hunger strike in 1983.

If such a campaign could succeed, it will be because, as Gandhi and King believed, truth will ultimately persuade. The truth in this instance is that it is to no one's interest to live in a first strike world. That truth must be proclaimed and communicated. However, the momentum of the ever more ominous arms race may not be broken by words alone. Perhaps hundreds or thousands of people must be willing in both mundane and dramatic acts to put their own lives on the line to affirm that humanity has the right to live freed of the menace of nuclear holocaust.

A worldwide political fast may be a vehicle for the final confrontation with the decision makers presently

* First strike weapons are those that give a nation the capability of destroying all or nearly all of an opponent's retaliatory weapons, thus destroying whatever deterrence the opponent's weapons previously provided.

ACTIVITIES

locked into the race to Armageddon. If such a fast proves necessary, if the demands of the fasters are at once reasonable, practical, and full of hope, if the fast is in the context of a widely supported campaign so that governments and media cannot trivialize or discredit it, the very real drama of such a fast might win over so many people that governments could not prevail against it.

For further information:

Campus Interfaith Ministry
Nonviolent Tactics Development Project
1414 Kincaid Street
Eugene, Oregon 97401, USA

INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE
1981-1990

Declared by the United Nations General Assembly

For further information:

Mary Lynn Hanley
UNDP
Information Division
1 UN Plaza
New York, N.Y. 10017, USA

INTERNATIONAL YEAR OF THE DISABLED PERSONS - 1981

Why the International Year of Disabled Persons (IYDP)

The United Nations General Assembly has decided that 1981 should be the International Year of Disabled Persons so that governments, organizations and groups of individuals around the world may combine their efforts to increase public awareness of the special difficulties faced by

ACTIVITIES

persons with visual, hearing, mental and motor disabilities, and promote realization of their basic human right to adequate care and education and to participate in the life of the community.

IYDP's aims

To promote action at the local, national, regional and international levels and, in particular, encourage governments to:

- o take a critical look at their national legislation concerning the disabled, and remove all barriers and discriminatory practices which may still affect their education and employment;
- o review programmes for the disabled in such areas as prevention, early diagnosis and treatment of handicaps, rehabilitation, special education, vocational training and employment opportunities, and train the professional and technical personnel needed to carry out these programmes;
- o improve the living and working conditions of handicapped people and their integration into society by providing, among other things, better access to education, public transport, places of work and recreation, and adapting buildings to meet their special needs;
- o show solidarity with disabled people in the developing countries by actively supporting the efforts of the United Nations and its agencies, and reinforcing bilateral and multilateral technical cooperation in prevention and rehabilitation programmes;

ACTIVITIES

- o encourage the handicapped to organize themselves effectively so as to make their views heard and participate actively in the work of policy-making bodies.

LATIN AMERICAN INSTITUTE OF TRANSNATIONAL STUDIES

Research Programme 1980

- A. ECONOMIC PENETRATION BY TNCs
 - a. General methodology and introductory studies
 - 1-6 General methodology, Balance of payment methodology, Map of sectorial complexes: Argentina 1963, Transnational presence in Peru, The economic structure in sectorial complexes: Peru, Transnationalization in Latin America: methods and hypothesis.
 - b. Automotive sectorial complex
 - 7-13 Methodology, Argentina, Brazil, Mexico, Peru, Uruguay, Synthesis.
 - c. Agroindustrial complexes
 - 14-30 Methodology, Mexico: fruits and vegetables, grains, Argentina: cattle-raising, grains, Brazil: Cattle-raising, grains, oil-seeds, dairy sector, tobacco, Peru: dairy sector, oil-seeds, grains, poultry, agro-industrial financing, Uruguay: cattle-raising, Synthesis (first stage)
 - d. Communications industry complexes (in collaboration with the Division of Communication Studies)
 - 31-34 Advertising and mass media, Transnational banking and communications industry, Chile: industrial model and mass communications, Transnational advertising and mass consumption strategies.
 - e. Finance and banking
 - 35-38 International financial centers, Chile: external financing, Nicaragua: political change and trans-

ACTIVITIES

- national banking, Methodology and case studies.
- f. Global studies
- 39- Labour force in the periphery, International restructuring and industrialization in Latin America.
- 40
- B. THE STATE AND TNSc: ECONOMIC POLICY AND DEVELOPMENT PATTERNS
- a. General methodology and introductory studies
- 41- Latin American thinking on dependence, Crisis in regional integration, Peru: revolution and enterprises reform, Chile: transnationalization of the economy.
- 44
- b. State enterprises and TNCs (Brazil, Mexico, Peru and Venezuela)
- 45 Methodology

For further information:

ILET
Ap. 85-025
Mexico 20 DF

PROJECT AGING AND WORLD ORDER

Launched by Global Education Associates

This project is being launched to bring the experience, insights and skills of older and retired adults to world order concerns and the development of alternative futures based on rules of peace, social justice, economic well-being, ecological balance and participation in decision-making. Project goals include the development of task forces of older adults that will:

- 1) Conduct research related to issues of aging and world order;
- 2) Prepare educational materials for networks of seniors;
- 3) Serve as liaison with senior citizen retirement communities and active aging groups;

ACTIVITIES

- 4) Develop and coordinate local and regional seminars, workshops, and conferences;
- 5) Organize, facilitate and provide speaking, workshops and other educational services;
- 6) Serve as liaison with local, national and international agencies preparing for the World Assembly on the Elderly.

For further information:

Global Education Associates
552 Park Avenue
East Orange, N.J. 07017, USA

MEETINGS

AMERICAN SOCIETY FOR CYBERNETICS, Annual Meeting, October 31 through November 2, 1981, Washington Hilton Hotel, Washington, D.C.

In 1981, the American Society for Cybernetics (ASC) plans to hold its first annual meeting in a number of years. The meeting will immediately follow the annual meeting of the American Society for Information Science and will be held in the same hotel. ASC invites all those interested in Cybernetics to participate in the meeting through paper presentations, panel discussions, or tutorials. The theme of the meeting will be "The New Cybernetics"; one of the objectives of the meeting is to redefine the field of cybernetics and to provide a focus for the research efforts of the rejuvenated society and its membership. It is expected that this new focus will be broader in scope than it has been in the past, encompassing all aspects of communication and regulation. Relevant topics for the meeting include concepts (e.g. requisite variety, self-organization, self-reference), methods (e.g. system dynamics, constraint analysis, Spencer-Brown mathematics), and applications (e.g. robotics, problem solving, pattern recognition, remote sensing, communication networks). Applications to all areas of human experience are encouraged.

As an example of the new spirit of ASC, efforts are being made to enlist the assistance of Intelsat and others in having a panel on "Cybernetic Centers". This panel will be conducted with the participation of colleagues from Australia and other countries using teleconferencing. If

MEETINGS

funds are available, ASC will provide computer time for online editing for all authors having access to terminals. For those not having such access, the papers will be entered into the system upon receipt, assuming funds can be found, for indexing and microfiche reproduction and distribution. Please mail your suggestions, along with a short abstract or description (100-200 words), to:

Dr. Laurence D. Richards
Department of Administrative Science
Colby College
Waterville, Maine 04901, USA

Abstracts should be received no later than April 30, 1981. Please indicate if you have access to a terminal for the preparation and entry of papers and if you would be interested in participating in the teleconferencing session on Cybernetic Centers either in person or from another country.

For further information, contact Larry at (207)873-1131 x587 or Stu Umpleby at (202)676-7530 (George Washington University). For information about the panel on Cybernetic Centers, contact Howard Hilton, 1222 Highland House, 5480 Wisconsin Avenue, Chevy Chase, Maryland 20015, USA (telephone (301)656-1585).

EEC CONFERENCE ON THE INFORMATION SOCIETY
Place: Shelbourne Hotel, Dublin, Ireland
Date: 18-20 November 1980

Information Technology - Impact on the way of life
Organised by FAST Programme (Forecasting and Assessment in Science and Technology) of the Commission of the European Communities and National Board for Science and Technology, Ireland.

MEETINGS

Call for Papers

This conference will examine the impact of new information technologies on the way of life of the individual and social groups. It will provide a forum for policy makers, representatives of different social sectors and researchers to develop alternative scenarios depicting European life in the 1990's. The conference will help to identify options for future EEC Research and Development Programmes.

Discussion will centre on the impact of information technology on key aspects of the daily life of the individual work, leisure, transport and communication. Within this perspective, the following issues will be considered:

- o Allocation and use of time
- o Concepts of work and leisure
- o Patterns of social communication
- o Access to and use of information
- o Cultural Expression and the media
- o Education and human development
- o Urban systems and transportation
- o Centralisation and decentralisation
- o Diffusion of new technology
- o Response to technological change

Extended abstracts together with other relevant material should be sent to the Conference Office by 15th February 1981. Authors will be notified by 30th April 1981.

Address for papers and information:
Liam Bannon/Ursula Barry
Conference Office
National Board for Science and Technology

MEETINGS

Shelbourne House
Shelbourne Road
Dublin, 4, Ireland
Tel: Dublin (01) 683311 ext 236
Telex: 30327 NBST E1.

ENTRETIENS ECOLOGIQUES DE DIJON

The third EED session will be held in Dijon from 31 March to 2 April, 1981.

The theme for this session is:

"Ecology, Spirituality, Ethics: a new approach"

For further information:

Georges Tendron, President
Entretiens Ecologiques de Dijon
B.P. 108
21003 Dijon Cedex, France
Telephone (80)71 44 34
Telex: BURDI 350690 F Code 214

GLOBAL FUTURES NETWORK INC.: SECOND GLOBAL CONFERENCE ON THE FUTURE

The Global Futures Network, established at the First Global Conference on the Future July 1980 in Toronto has announced that the Second Global Conference is going to take place in Bombay, India. "Opening on January 1, 1984, the four-day event will kick-off with a world-wide series of Orwellian-theme New Year's Eve Parties on December 31, 1983. Simultaneous satellite-linked conferences in other major world centers are planned."

MEETINGS

GLOBAL MODELING FORUM: GLOBAL MODELING AT THE SERVICE OF THE DECISION MAKER, September 14-18, 1981, Laxenburg, Austria

Organizer: The International Institute for Applied Systems Analysis (IIASA)

Scientific Preparation: Gerhart Bruckmann, John Richardson
Press and Public Information: Peter Schlifke

The Purpose of the Forum

What are the basic messages of the global models? How do they differ and why? Do they provide any consistent picture of the state of our planet? Do they offer any new ideas about how to deal with important problems? Can they help the decision maker who finds himself faced primarily with issues defined nationally and in the short term?

The groups responsible for the following models have agreed to participate actively (by elaboration and presentation of answers to questions): World 3 (Forrester/Meadows), WIM (Mesarovic/Pestel), Bariloche (Herrera), SARUM (Roberts), FUGI (Kaya), FAP (IIASA), Global 2000 (Barney), LINK (Klein/Hickman), DYNAMICO (Costa), GLOBUS (Deutsch/Bremer), and GPID (Galtung). Invitations have, furthermore, been extended to the Leontief model, the Soviet Model (Gelovani), ZENCAP (Codoni/Fritsch), SEAS (Steger/House), the ILO Model (Hopkins/van der Hoeven), INTERFUTURES (Lesourne), FAST (Petrella), the IIASA Energy Model, Waelbroeck, Krishnaya, and Kile. Not all of them are formal computer models; some are more informal efforts to link forecasts from a variety of sources, including informed human judgement.

MEETINGS

For further information:

IIASA
Global Modeling Review
Schlossplatz 1
A-2361 Laxenburg, Austria

INTERNATIONAL CONGRESS OF THE HISTORY OF SCIENCE to be held in Bucharest, between August 26 - September 3, 1981 on the theme "Science, technology, humanism and progress".

A round table on "Future Trends in Science and Technology for Human Development" is organized within the framework of the congress, under the auspices of the Romanian Academy of Social and Political Sciences, the World Future Studies Federation (represented by the International Center of Methodology for Future and Development Studies in Bucharest) and the UNESCO National Commission.

The aim of the round table is to offer a prospective dimension on the development of science and technology and on their consequences on society. For this purpose the tentative topics suggested for debate are the following:

1. Science, technology and the social and human development;
2. Desirable, possible and feasible in the forecasting and planning of science and technology;
3. Major areas of the development of science and technology: energy, biology (microbiology, genetics, molecular biology etc.), oceans, space;
4. New paradigms in the development of science and technology (Values/facts, context, participation etc.).

Participation conditions: the registration fee for the Congress is 80\$. Participants only in the round table do not have to pay this fee.

MEETINGS

Proceedings. It is suggested that the participants elaborate papers of at most 15 pages which will be distributed before the works of the round table. The topics discussed at the round table as well as the papers presented will be included in a volume to be subsequently published.

For further information:

Prof. dr. Mihnea Gheorghiu
Academy of Social and Political Sciences
Bucuresti 1
Str. Onesti nr. 11

INTERNATIONAL PEACE RESEARCH ASSOCIATION - 9th General
Conference

Date: 21-25 June 1981
Place: Orilla (Canada)

Organization

The next IPRA General Conference will be held in Canada, June 21 to 26, 1981. The conference will be organized by Peace Research Institute-Dundas and COPRED in cooperation with the IPRA Secretariat. Consulting persons from other peace research organizations include:

Dr. Norman Alcock, Canadian Peace Research Institute
Dr. Conrad Brunk, Peace & Conflict Studies, University
of Waterloo
Dr. M.V. Naidu, Canadian Peace Research & Education
Association
Dr. Leonard Gambrel, COPRED
Ms. Betty Reardon, COPRED

MEETINGS

Program

The program for the conference will consist of seven commissions, 2 plenary sessions and an administrative meeting of IPRA. Participants are expected to sign up for one of the commissions. Indicate on the registration form which commission you wish to attend and if you plan to give a paper at that commission. Those who are presenting papers are asked to contact the convenors of the relevant commission indicating their desire to present a paper. The commission are as follows, indicating names and addresses of the convenors.

COMMISSION 1: MILITARISM; DISARMAMENT AND ALTERNATIVE SECURITY

Richard A. Falk. Center of International Studies,
Princeton University, Princeton, N.J. 08540, USA.
Asbjorn Eide. Peace Research Institute Oslo, Radhusga
tan 4, Oslo 1, Norway.

COMMISSION 2: RESOURCES, TECHNOLOGY AND THE NEW INTERNATIONAL ORDER

Fred Knelman. Dept. of Science and Human Affairs,
Concordia University, 1455 De Maisonneuve Blvd.,
Montreal, Quebec, Canada.

Jarmila Olmedo de Garcilita. Cerrada De Aquila 27,
San Jeronimo Lidice, Mexico 20, D.F., Mexico.

COMMISSION 3: POLITICAL ECONOMY OF FOOD AND HUMAN NEEDS

Mervi Gustafsson. Tampere Peace Research Institute,
P.O. Box 447, SF-33101, Tampere 10, Finland.
Pat Mooney, R.R.1, Brandon, Manitoba, Canada,
R7A 5Y1.

COMMISSION 4: INTERNATIONAL STRUCTURE OF COMMUNICATION

Tapio Varis. TAPRI, Tammelanpuistokatu 58B,
33100 Tampere 10, Finland.

Dallas Smythe. Simon Fraser University, Dept. of
Communication, Burnaby, British Columbia, Canada.

COMMISSION 5: HUMAN RIGHTS, CULTURAL AUTONOMY AND WORLD COMMUNITY

Corinne Kumar D'Souza. Centre for International
Education and Development Studies, No. 27 St.,
Mark's Road, Bangalore 56001, India.

Evelyn Kallen. Dept. of Social Science, York University,
4700 Keele, Toronto, Ontario, Canada.

COMMISSION 6: PEACE EDUCATION

Robert Aspeslagh, Netherlands Institute for Studies
on Peace and Security, 7 Alexanderstreet, The Hague,

MEETINGS

The Netherlands.

Douglas Ray. Dept. of Education, University of Western Ontario, London, Ontario, Canada, L9H 4E5.

Celina Garcia. Box 8 - 4820, San Jose, Costa Rica.

COMMISSION 7: COOPERATION AND INTERDEPENDENCE

Hanna Newcombe. Peace Research Institute-Dundas, 25 Dundana Avenue, Dundas, Ontario, Canada.

Ed Azar. Dept. of Political Science, University of North Carolina, Chapel Hill, N.C. 27514, USA.

For further information on these conferences write to:

Hanna Newcombe
Peace Research Institute-Dundas
25 Dundana Avenue
Dundas, Ontario, Canada L9H 4E5

TOWARD A HUMANE FUTURE - REVISIONING HUMAN NATURE AND REALITY

II International Summer Conference

Date: 23 August - 13 September, 1981

Place: Crete (Greece)

The goal of the II International Summer Conference will be to enter into an interdisciplinary discussion of the major conceptual controversies and to explore possible alternatives to the old ways of thinking and the traditional paradigms. One accent will be the promising convergence between quantum-relativistic physics, neurophysiology, mysticism, and consciousness research; we will learn about the exciting developments in such diverse fields as molecular biology, the different social sciences, as well as economics and political science.

In general: we will explore together the linkages between personal and planetary transformation, look at some emerging images of reality, preview our future capabilities as a species, experience ways we can overcome our separations from ourselves, each other, and our deeper wisdom, and examine our own personal responsibility.

MEETINGS

Fifteen internationally known scientists and scholars with humanistic orientation will hold lectures, seminars, workshops and discussions with regard to the conference theme.

Five of the fifteen presenters will determine one week's program. The morning sessions will consist of five groups, in which each leader presents his work. In the early afternoon there will be a block of time, which may be used according to the discretion of the participants - for interaction, meditation, extra workshops, etc. In the late afternoon there will be a presentation by one of the five leaders to the plenum. The other leaders will then participate in a panel discussion.

For further information:

Forum

Postfach 2841

D-7000 Stuttgart 1, West Germany

WORLD FUTURES STUDIES FEDERATION: Third meeting on "Visions of desirable societies, Mexico City, April 22-25, 1981.

These meetings have been organized in cooperation with Centro de Estudios Economicos y Sociales del Tercer Mundo (CEESTEM) and the UN University, GPID Project. The following papers will be presented:

- o "Intuition, unconsciousness and visionary creation" by Stanislau Nievo, Italy;
- o "Work, skill and knowledge" by Liliana Acero, Argentina;
- o "African personality and vision of desirable societies" by Beni Khoapa, South Africa;
- o "Science in Utopia" by Ashis Nandy, India;
- o "New Directions for Capitalism, a Negative Vision", by Ian Miles, Great Britain;

MEETINGS

- o "A precondition of a more rational society" by Mihailo Markovich, Yugoslavia;
- o "Small is beautiful, is big necessary? On weaving societies of autonomous units" by Johan Galtung, Norway.

WORLD FUTURES FEDERATION: Regional meeting in the Hague, the Netherlands, end of October or beginning of November.

In cooperation with the Netherlands Scientific Council for Government Policy a regional meeting is planned on the subject of "The future of government and political institutions". Further information will be given in the next Newsletter.

UNITED NATIONS

Two conferences which will have an impact on the contents of the Global Negotiations are planned for 1981.

The U.N. Conference on New and Renewable Sources of Energy is to be held in Nairobi, Kenya 10-21 August, preceded by inter-regional and pre-conference consultations from the August 1st. NGO activity around this meeting is being co-ordinated by the Environmental Liaison Centre, P.O.Box 72461, Nairobi.

The U.N. Conference on Least Developed Countries, 1-14th September, will focus attention on emergency and long-term measures to alleviate the plight of these countries.

COURSES

THE FUTURE OF RELIGION: SOURCE, PRODUCT OR NEGATION OF ALIENATION?

Date: 20-30 April, 1981

Place: Dubrovnik

Course Directors: Rudolf J. Siebert (Kalamazoo, Mich.)
Srdan Vrcan (Split)

Course Description

The fundamental concern of the discourse is the differentiation of the traditional unity of the religious and the secular in Modernity, to the point of antagonism, mutual hostility and even indifference. The Course will explore, which futures can possibly arise from the modern antagonism between religious and secular consciousness, revelation and enlightenment, redemption and emancipation, salvation and happiness? Return to traditional religion? Progress toward a totally secularized administered or reconciled society? Development of a united worldview: in which the finite and the Infinite, the relative and the Absolute, the contingent and the Ultimate can once more be seen in each other and can thus be in balance, and in which personal, social and religious identity are newly reunited? Can the religious worldviews fully be introduced into the modern age and even carried over into a postmodern epoch? The Course will focus on the theodicy problem as it pre-occupies today believers and enlighteners alike. It will discuss the new thesis, that there is and has been not only alienated religion, but that there may be or may come about

COURSES

with the change in the economic basis of modern societies also an unalienated religion with an affirmative attitude toward the continuation of man's liberation history. The course will attack the religious problems against the horizon of the possibility, probability and desirability of Future I - the totally administered, technocratic, one-dimensional, cybernetic, neo-cesaristic society, Future II - the partial or total thermonuclear holocaust, and Future III - the reconciled society of reason and freedom, the humanistic worldfederation.

For further information:

INTER-UNIVERSITY CENTRE of postgraduate studies

Frana Bulica 4

YU-50 000 Dubrovnik, Yugoslavia

Telephone (050)28-666

INTERNATIONAL COURSE IN TECHNOLOGICAL FORECASTING

Organized by the Technical University of Wroclaw, Futures Research Center, Wybrzeze Wyspianskiego 27, 50-370 Wroclaw, Poland.

Date: Autumn 1981

The course is meant for the persons employed as supervisors responsible for the prognostic recognition in the field of technological innovations and for the strategy of technological development of the corporations and enterprises (particularly those under the state management or supervision) in the developing countries.

The course, in a form of a 10-day session is planned to be repeated with the frequency dependent on the number of applications. The first session will be held in autumn

COURSES

1981 in one of the recreational centers of our university located in the mountains.

The costs of the course, including lecturers and the work of the assisting staff, accomodation in single and double rooms, board and travel expenses from Wroclaw to Karpacs and the recreational program is 925 US dollars.

I would appreciate any comments on the program of the course, especially an evaluation of the adequacy of the content to the assigned purposes as well as any other remarks.

I would be particularly grateful for your indicating supervisors of institutions and organizations who might be interested in directing their collaborators to the course or indicating persons which might be directly interested in the course.

INTERNATIONAL SUMMER SCHOOL, UNIVERSITY OF OSLO

Date: June 27-August 7, 1981

Peace Research

Four semester-hour credits.

Peace Research is a cross-disciplinary science, dealing with problems of peace, conflict and development. This source will provide an introduction to general theories in peace research, and reflect current studies and research programs at the Peace Institute, Oslo (PRIO). Important subjects are conflict theory and conflict resolution, the arms race and disarmament problems, structural violence and social mobilization, dominance structures and development,

COURSES

human rights and basic needs. The course will also give an introduction to peace research documentation and information.

The course is open to graduates and advanced undergraduates with a background in any of the social sciences. Those interested may ask to have last year's course schedule sent to them.

The course is organized by the Peace Research Institute, Oslo, and is conducted by institute staff.

Norway and Scandinavia in International Relations

Four semester-hour credits.

The basis of this course is the foreign policies of the five Nordic countries, and the course will focus on a series of central issues in these policies. Issues in European and global politics will thus be brought into the class presentations.

Time in class will be divided between lectures and discussions. The course is undergraduate, but can also be taken for graduate credit. Students should have at least one year of studies in one of the social sciences, journalism, or related fields.

Norwegian Political Life and Institutions

Four semester-hour credits.

The frame of reference for this course is the Norwegian political system, but the main emphasis is placed on a comparative approach. Nordic and other European political

COURSES

problems will be brought in to illustrate the complexity of present day government. Political controversies such as the impact of the EEC-referendum of 1972, development of oil, and center-periphery tension in Norwegian politics will be discussed.

The course is undergraduate, but can also be taken for graduate credit.

For further information:

International Summer School
University of Oslo
Postboks 10, Blindern
Oslo, Norway

POST SCRIPTUM:

THE GIFT RELATIONSHIP

Forms of exchange and their implications for social life:
an experiential workshop.

May 14th-17th, 1981.

"The obligation to give is also important. If we understood this, we should also know how people came to exchange things with one another. We merely point out a few facts. To refuse to give, or to fail to invite, is - like refusing to accept - the equivalent of a declaration of war: it is a refusal of friendship and intercourse."

For further information:

Group relations training association
Alan Dale
B.I.O.S.S.
Brunel University
Uxbridge, Middlesex, G.B.

PUBLICATIONS

AID AS AN OBSTACLE

Twenty Questions about our Foreign Aid and the Hungry

By Frances Moore Lappé, Joseph Collins, David Kinley

Institute for Food and Development Policy, 1980

ALTERNATIVE FUTURES

Technology and Pessimism

Special issue including articles by Leo Marx, Samuel Florman, Eugene Goodheart, Richard Falk, Melvin Kranzberg, Victor Ferkiss.

Human Dimension Center, Rensselaer Polytechnic Institute, Troy, N.Y. 12181, USA.

AXIOLOGY, the Science of Values

ETHICS, the Science of Oughtness

A pair of books bound together by Archie J. Bahm, World Books, 1980.

BEYOND THE NORTH-SOUTH STALEMATE

By Rodger D. Hansen

McGraw-Hill Book Company for the 1980s Project of The Council on Foreign Relations.

Among the contents:

- I Thinking about North-South Relations in the 1980s
- II The Emerging North-South Axis in World Politics
- III South and North in the Coming Decade: Some Crucial Questions of Evolution
- IV Three Modal Approaches to North South Relations in the 1980s.

For further information:

Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036, USA

PUBLICATIONS

BIBLIOGRAPHY OF PUBLISHED RESEARCH OF THE WORLD EMPLOYMENT PROGRAMME, 1979

- o EMPLOYMENT GROWTH AND BASIC NEEDS: A ONE-WORLD PROBLEM (1978)

Including the Declaration of Principles and Programme of Action adapted by the Conference.

Tripartite World Conference on Employment, Income Distribution and Social Progress and the International Division of Labour.

- o FOLLOW-UP OF THE WORLD EMPLOYMENT CONFERENCE: BASIC NEEDS (1979)

International Labour Conference 65th Session, 1979.

- o WORLD EMPLOYMENT PROGRAMME: RESEARCH IN RETROSPECT AND PROSPECT - 1979 EDITION

These publications are available at ILO, CH-1211 Geneva 22, Switzerland.

CHINA AND THE WORLD FOOD SYSTEM

By Doak Barnett, Monograph N. 12, April 1979 and

DEVELOPMENT IN THE PEOPLE'S REPUBLIC OF CHINA: A SELECTED BIBLIOGRAPHY

Prepared by Patricia Blair for the China Round Table of The Washington Chapter of SID. Occasional Paper No. 8, December 1976.

For further information:
Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036, USA

CHINA AFTER MAO

By TK Moulik

For further information:
Indian Institute of Management
Vastrapur
Ahmedabad-380015, India

COLLECTION FUTURIBLES

- o LE RISQUE TECHNOLOGIQUE MAJEUR

PUBLICATIONS

By Patrick Lagadec, Pergamon Press, 1981.

Two further books in the same collection but in English will shortly be published by Futuribles in Paris.

The first: "Établi à partir du numéro spécial de la revue sur la conquête spatiale et ses retombées technologiques, économiques et sociales".

The second: Maurice Guernier on "Le Tiers-Monde, Trois-Quart du Monde".

DIALOGUE ON WEALTH AND WELFARE
An Alternative View of World Capital Formation
A Report to the Club of Rome

By O. Giardini, Graduate Institute of European Studies,
Geneva

The Club of Rome has become renowned for its efforts to change the patterns of thinking of the Western World in order to incorporate the needs of the Third World.

This report stresses the need for new definitions in economic terminology, so that terms such as savings and capital requirements are meaningful in the context of largely non-monetarized economies (for example those of the Third World countries) as well as the Western economy. If re-evaluated, the terms become a more useful reference when exploring means to overcome the problems generated by a rapidly accelerating world population.

For further information:
Pergamon Press Ltd.
Headington Hill Hall
Oxford OX3 0BW, England

EDUCATION: A TIME FOR DECISION

Edited by Kathleen Redd and Arthur M. Harkins, 1980.

Selections from the Second Annual Conference of the Education Section of the World Future Society.

Published by World Future Society.

ENTROPY

By Jeremy Rifkin with Ted Howard

Viking, New York 1980.

PUBLICATIONS

EQUALITY, DEVELOPMENT AND PEACE
Report of the World Conference of the United Nations Decade
for Women
Copenhagen 14 to 30 July 1980

United Nations publications. The report is available at US\$ 18.00.

THE FUTURE OF THE HEALTH SCIENCES

By Stanley Lesse

Irvington Publishers, New York 1981.

FUTURE SURVEY ANNUAL, 1979

Edited by Michael Marien, World Future Society 1980.

A guide to the recent literature of trends, forecasts and policy proposals.

FUTURIBLES 2000
Special Issue, November 1980

La conquête spatiale: ses retombées technologiques, économiques et sociales.

Futuribles, 55 Rue de Varenne, 75007 Paris, France.

FUTURUM

By Ossip K. Flechtheim (editor)

Beiträge des Instituts für Zukunftsforschung by Minerva
Publications, München 1980, 378 pp.

Articles by Johan Galtung, P. Mencke-Gluckert, L. Lombardo Radice, A.J. Waskov, B. von Steenberg, R. Jungk, Olof Helmer and others.

JOHAN GALTUNG: A BIBLIOGRAPHY OF HIS SCHOLARLY AND POPULAR WRITINGS 1951-1980

The Galtung bibliography is Peace Research Monographs No. 9 from the International Peace Research Institute, Oslo.
ISBN 82-7288-004-0.

Copies of this bibliography may be purchased for US \$25 or Norw. kr. 125 from PRIO, Rådhusgata 4, Oslo 1, Norway.

PUBLICATIONS

THE GIFTED DISADVANTAGED

A ten year Longitudinal Study of Compensatory Education in Israel

By Moshe Smilansky and David Nevo, Tel Aviv University, Israel.

Gordon and Breach, Publ.
London, New York, Paris 1979

GLOBAL 2000 REPORT TO THE PRESIDENT

Follow up volume: Global Future - Time to Act

For further information:
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402, USA

INDICATEURS SOCIO-ECONOMIQUES DU MAROC

Une mesur qualitative du niveau de développement

By Abdelmalek Cherkaoni

Shoof Publ., 1980

INPUT-OUTPUT APPROACHES IN GLOBAL MODELING

By G. Bruckmann (Editor)

This volume provides an authoritative survey of the role which input-output techniques have played, and may play, in global modeling work. It contains detailed analyses of the two leading input-output global models, the Leontief model ('The Future of the World Economy') and FUGI (Future of Global Interdependence), a model developed by a group of Japanese scientists and published here in full for the first time in English. Reports on other input-output models include the first survey on global modeling work in the USSR and papers on recent developments in global modeling.

Published on behalf of the International Institute of Applied Systems Analysis, Laxenburg, Austria, 1980.

Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 OBW, U.K.
Pergamon Press Inc., Fairview Park, Elmsford, New York 10523, USA.

DER KAMPF UM DIE ZUKUNFT

By Ossip K. Flechtheim

PUBLICATIONS

Grundlagen der Futurologie
Aktualisierte Sonderausgabe 1980
XXI, 432 Seiten. Broschiert
18,- DM
ISBN 3-8012-0046-9

THE MANAGEMENT OF SUSTAINABLE GROWTH

By Harlan Cleveland

Pergamon Press 1981
Headington Hill Hall
Oxford OX3 OBW, England

MEASURING THE CONDITION OF THE WORLD'S POOR: THE PHYSICAL QUALITY OF LIFE INDEX

By Morris David Morris. Published for the Overseas Development Council by Pergamon Press.

For further information:
Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036, USA

MOBILIZING TECHNOLOGY FOR WORLD DEVELOPMENT

Edited by Jairam Ramesh and Charles Weiss Jr. 1979

With a Foreword by Barbara Ward and the complete Report of the Jamaica Symposium.

Among the contents:

- I Mobilizing technology for World Development: Report of the Jamaica Symposium
- II The Nature and Consequences of International Technology Flows
- III Commercial Technology Flows and Transnational Enterprises
- IV Mobilizing Science and Technology for National Needs
- V National and International Action to Mobilize Technology for Global Problem Management

For further information:
Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036, USA

PUBLICATIONS

NEWSGRAM

Bulletin compiled by the Society for International Development from the wires of Inter Press Service and Independent Services. 10 issues per year. Distributed free to members.

Editorial office:
SID
Palazzo Civiltè - del Lavaro
00144 Rome, Italy

POLICY ALTERNATIVES FOR A NEW INTERNATIONAL ECONOMIC ORDER: AN ECONOMIC ANALYSIS

Edited by William R. Cline

Published for the Overseas Development Council by
Praeger Publishers, May 1979.

Contents:

- o A Quantitative Assessment of the Policy Alternatives in the NIEO Negotiation (W.R. Cline)
- o International Commodity Agreements: An Evaluation of the UNCTAD Integrated Commodity Programme (J.R. Behzman)
- o Grain Reserves, Emergency Relief and Food Aid (A.H. Sazzis, P.C. Abbott, L. Taylor)
- o Trade Reform Options: Economic Effects on Developing and Developed Countries (T.B. Birnberg)
- o The External Debt Prospect of the Non-Oil Exporting Developing Countries (G.W. Smith)
- o Resource Transfers to the Developing Countries: Issues and Trends (W.R. Cline)
- o World Market Imperfections and the Developing Countries

For further information:
Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036, USA

PUBLIC POLICY AND FUTURES BIBLIOGRAPHY

Compiled by Hugh A. Stevenson
Ministry of Education, Ontario, 1980

A select list of Canadian, American and other book-length materials, 1970 to 1980, including highly selected works published between 1949 and 1969.

PUBLICATIONS

RESOURCES, SOCIETY AND THE FUTURE

By Secretariat for Futures Studies, Stockholm, Sweden

Published by Pergamon Press, 1980

This extensive, interdisciplinary report examines the global problem of diminishing natural resources and raw materials and their associated political and social implications.

SCIENCE, TECHNOLOGY, AND NATIONAL POLICY

Edited by Thomas J. Kuehn and Alan L. Porter

Cornell University Press
P.O. Box 250
Ithaca, New York 14850, USA
ISBN 0-8014-1343-5
608 pages, \$35.00
Also available in paper
ISBN 0-8014-9876-7
608 pages, \$9.95

SOCIAL TRENDS

The Institut Eurisko publishes SOCIAL TRENDS a bi-monthly bulletin in Italian language, where are reported the main recent sociocultural trends in Italy and in the western countries. SOCIAL TRENDS is free to everybody who requests it to:

EURISKO
Istituto per lo studio
degli atteggiamenti
Via Monte Rosa, 15
20149 MILANO
Telex 314655

SOCIOLOGICAL JOURNEYS: ESSAYS 1960-1980

By Daniel Bell

Heinemann, London 1980
£12.50

SOLAR VERSUS NUCLEAR, CHOOSING ENERGY FUTURES

By Secretariat for futures studies, Stockholm, Sweden

Published by Pergamon Press, 1980.

PUBLICATIONS

Society is faced with ever-diminishing supplies of fossil fuels and must turn to alternative sources of energy. Solar and Nuclear are the two most obvious choices as the primary, future energy source. This study states the comparative advantages and relative viability of each system, and each is examined from the technical, economic, political and institutional standpoints.

SOUTH: THE THIRD WORLD MAGAZINE

South will project the point of view of the developing countries, their problems, aspirations, and what is much less frequently told, their achievements.

For developing countries, the Eighties will be dominated by the Global Negotiations for a New International Economic Order. This will also be a time of global economic stress with strains, consequently, in North-South relations. These trends make it important that the voice of the developing countries should be heard.

The main concern of South will be economic and financial issues, especially commodities and raw materials.

South has been devised to fill a gap in current reporting on the Third World by presenting a "view from within". Most of our writers are Third World journalists and specialists. With their instinctive feel for the history, the interplay of personalities and groups, and personal quirks in their countries we think they will be more sensitive than others to the nuances of Third World developments.

There are many good regional journals, each dealing separately with Africa or Asia or Latin America. South is unique in that it has the wider sweep of all the developing countries.

The first issue was published in October 1980.

For further information:

South
13th Floor
New Zealand House
Haymarket
London SW1Y 4TS, U.K.

THE STATE OF THE WORLD ATLAS
A Pluto Press project

By Michael Kidron & Ronald Segal

PUBLICATIONS

Pan paperback £5.95
Heinemann Educational hardback £9.50
ISBN 0 330 26334 X

The State of the World Atlas is revolutionary both in content and form. It portrays statistical information about the state of the world today using 66 strikingly clear full-colour maps, each with an explanatory key and accompanying notes. The provide a startling perspective on the vital economic, sociological, environmental and political issues affecting the world's Sovereign States and their dependent territories.

Dealing first of all with the consequences of the proliferation of states in the last few decades - including the increasing preoccupation with military resources, the destruction of the environment and the erosion of human rights - The State of the World Atlas goes on to reveal the remarkable inequalities and contrasts between states, emphasising how unevenly the world's resources are distributed and exposing the widening gap between rich and poor nations.

The final section identifies some of the symptoms of global crisis - inflation, decreasing industrial growth, decline in purchasing power of national currencies - and points to some of the signs of challenge to the system.

SWEDEN IN WORLD SOCIETY
Thoughts about the future

By Secretariat for futures studies, Stockholm, Sweden

Published by Pergamon Press 1980

An interdisciplinary study of the global development which pays particular attention to the problem of survival for small developed states.

THIRD WORLD WOMEN SPEAK OUT
Interviews in Six Countries on Change, Development and Basic Needs

By Perdita Huston

Published in cooperation with The Overseas Development Council by Praeger Publishers, 1979.

For further information:
Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036, USA

PUBLICATIONS

TOWARDS POLAND 2000 - PROBLEMS OF SOCIAL DEVELOPMENT, 1980

- o Including
- o Social Forecasting in Poland: Inspirations, Directions and Approach
- o Social and Cultural Framework
- o Selected Monographic Studies
- o Spatial Problems

By various authors. Edited by Jan Danecki and Jerzy Krycki.

For further information:

Poland 2000
Polish Academy of Sciences
Polac Kultury Nouki
Vorsaw, Poland

TRAVAIL ET EMPLOI: VERS QUELLE SOCIETE?
Series of Research No. 1, 1980

International Research Colloquium, Lisboa 21-25 January
1979.

Published by CEFRES: European Women's Center for Studies in
a Changing Society.

For further information:

Cefres
55 Rue de Varenne
75007 Paris, France

THE UNITED STATES AND WORLD DEVELOPMENT AGENDA 1979

By Martin M. McLaughlin and the staff of the Overseas
Development Council, 1980.

Published by Praeger for the Overseas Development Council
\$5.95

For further information:

Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036, USA

LA VIE DE LA VIE

By Edgar Morin (Le Seuil Paris 1980)

Le Nouvel Observateur 5-11 January 1981 (Michel
Bosquet) characterizes this book as one of the most import-
ant of this century, trying to analyse and think the
paradigm of living complex systems and enlighten the

PUBLICATIONS

problematique of the relations between individual/society/
state.

WFSF NEWSLETTER

Members are asked, if they would like to have the list
of content of the most important futures journals reprinted
in the journal. Is it of interest to have only different
samples or should it be the latest available issue before
the actual printing of the Newsletter? It will probably be
too thick a volume if the content of every published issue
should be included.

The choices for this issue are as follows. We have for
our own convenience photocopied the original journals.

analysen und prognosen über die welt von morgen

Inhaltsverzeichnis

Seite

Editorial	
Frieden ist der Ernstfall	
Peter Menke-Glückert	3
Informationen – Für die Zukunft relevant	6
Focus	
Die Mobilisierung der Öffentlichkeit nicht nur Marion Kern	14
500 Milliarden Dollar für die Rüstung	
Auszüge aus dem SIPRI-Jahrbuch '80/81	15
Overkill – Social and economic consequences of the arm race	
Hyke Tromp	17
Die Krise der Rüstungskontrolle ist eine Krise der Rüstungspolitik	
Alfred Mechtersheimer	21
Den Frieden denkbar machen – Eine Aufgabe wirksamer Friedensforschung	
Lothar Schulze	22
Erhebliche Gefahren durch die Kernkraft	
Harald Müller	25
Ein historisch neues Konfliktpotential	
Lutz Mez	28
Wie kann „Frieden“ gelehrt werden?	
Horst Rumpf	29
„Der größte intellektuelle Zirkus der Welt ...“	
Rüdiger Lutz	30

... UND FRIEDEN



HOFFNUNG

Was man alles dir entrisen
Liebe, Glauben und Vertrauen
Halte nur die Hoffnung fest!
Ihr darfst du ins Auge schauen!

AUF ERDEN

PUBLICATIONS

Institut für Zukunftsforschung IFZ

Gemeinnützige Gesellschaft mit beschränkter Haftung
Giesebrechtstraße 15
1000 Berlin 12
Telefon 184815 ifz d
Telefax 030-8801-1 (Durchwahl)

• Direktoren

Dipl.-Kfm. Hans Buchholz (211)
Professor Dr. Ossip K. Flechtheim
Dipl.-Ing. Dieter Kolb (265)
Dipl.-Phys. Rolf Kreibich (237)

• Mitarbeiter in der Forschung

Grad. Grafik Wolfgang Bärz (223)
Dipl.-Ing. Peter Berger (244)
Dipl.-Ing. Manfred Birreck (219)
Dipl.-Ing. Winfried Bormann (217)
Dipl.-Ing. Andreas Brockmüller (260)
Professor Dr. Walter Bückmann (257)
Dipl.-Bibliothekar Andreas Curtius (223)
Louis A. Derno M. Arch. (219)
Dipl.-Ing. Günther Ehrent (227)
Wilfried Engel (230)
Dipl.-Pol. Christian Engel (229)
Klaus Peter Fiebes (228)
Dipl.-Soz. Karin Fiege
Gunnar Grugelke (242)
Dr. Peter Haas (221)
Mareen Heidenreich-Zabel (264)
Dipl.-Ing. K. D. Heise (263)
Stefanie Hüffel (216)
Dipl.-Kfm. Hannelore Illing (256)
R. A. Günter Jensen (241)
Marion Krampe (263)
Johanna Kratzsch M. A. (247)
Dipl.-Ing. Christoph Lange (261)
Dr. Lutz Mez (253)
Werner Nowack (231)
Dipl.-Soz. Uli Oel (258)
Dr. Erdogan Oksay (222)
Dipl.-Volksw. Birger Ollrogge M. A. (254)
Dipl.-Volksw. Helgomar Pichlmayer (248)
Ulrich Schumann (234)
Dipl.-Soz. Eva Schulze (216)
Jochen Spohn
Martin Volpert (235)
Dipl.-Pol. Ute Welzel (222)
Dipl.-Pol. Hans-Jürgen Will (240)
Matthias Zausch (230)

• Berater in Forschungsprojekten

Professor Dr. Ünal Akınar
Dipl.-Arch. Conrad U. Brunner
Ernst Bonds
Ing. Bertram Canzler
Dipl.-Inform. Bernd-Christian Kastler
Professor Jochen Krüger
Professor Dr. Lenz
Dr. Christian Rietmüller
Prof. Dr. Strümpel

• Sekretariat

Inge Böhm (238)
Sabine Fischer (238)
Mathilde Reuter (236)
Annette Schütze (214)
Evelin Stephan (213)

• Rechnungswesen

Angelika Gehrike (225)
Dipl.-Kfm. Peter Terber (220)

IFZ-Büro Bonn

Heussallee 20 · 5300 Bonn 1 · 0228-21 55 43
Leitung: Dipl.-Ing. Bernd Graßmugg

Mitarbeiter: P. Bischoff
Rolf-Ulrich Dreyer
R. Nüchtern
Rainer Schmitz

Sekretariat: Lothar Grube

Beirat des IFZ

Professor Dr. Nils Diederich MdB
Freie Universität Berlin
Institut für ökonomische und soziologische Analyse
politischer Systeme

Professor Dr. Karl-Hermann Hübner

Technische Universität Berlin
Institut für Landschaftsökonomie
Professor Dr. Martin Jänicke
Freie Universität Berlin
Institut für Innenpolitik und Komparatistik

Professor Dr. Heinz-Hermann Koelle

Technische Universität Berlin
Institut für Luft- und Raumfahrt
Professor Dr. Fritz Krückeberg
Gesellschaft für Mathematik und Datenverarbeitung mbH

Professor Dr. Jürgen Kunze MDA

Fachhochschule für Wirtschaft
Facheinheit: Makroökonomie und Allg.
Wirtschaftspolitik, Schwerpunkt: Bildungsökonomie

Professor Dr. Karl-Hans Laermann MdB

Fachbereich Bautechnik
Gesamthochschule Wuppertal

Professor Dr. Rainer Mackensen

Technische Universität Berlin
Institut für Stadt- und Regionalplanung

Dr. Dieter Martens

Institut für Arbeitsmarkt- und Berufsforschung

Professor Dr. Frieder Naschold

Wissenschaftszentrum Berlin
Internationales Institut für Vergleichende
Gesellschaftsforschung

Senator Walter Rasch

Senator für Schulwesen

Professor Dr. Herbert Stachowiak

Gesamthochschule Paderborn
Fachbereich I – Philosophie

Professor Dr. Werner Voss

Ruhr-Universität Bochum
Abteilung für Sozialwissenschaften

IFZ-Forschungsvorhaben

- Entwicklung eines Programms zur Vorbereitung von Managern auf die Pensionierung (Deutsche Unilever GmbH)
- Rationelle Energieverwendung bei der Stadt-erneuerung. Untersuchung in drei Modellgebieten Berlins (BMFT in Arbeitsgemeinschaft mit Battelle-Institut e. V., Schmidt Reuter Ingenieurgesellschaft GmbH und Co KG, Bertram Canzler ber. Ing.)
- Bürgerbeteiligung im Rahmen der kommunalen Entwicklungsplanung (Bundesanstalt für Landeskunde und Raumordnung)
- Entwicklung eines computergestützten Planungs-modellsystems zur Beeinflussung der Bevölkerungs-entwicklung, des Arbeits- und Wohnungsmarktes. (Stiftung Volkswagenwerk)
- Einstellungen und Beschlüsse Europäischer Staaten zur Kernenergie (BMFT)
- Industrie-Profil der bundesrepublikanischen Atomwirtschaft (Transnational Institute, Amsterdam)
- Datenschutz bei rechnerunterstützten Telekommunikationssystemen (DARUTS), (GMD, Bonn)
- Kinder ausländischer Arbeitnehmer im schulischen Bereich in Berlin (West). (Der Regierende Bürgermeister von Berlin, Senatskanzlei)
- Wasserwirtschaftliche Auswirkungen von Wärmepumpen. (Umweltbundesamt, Berlin)
- Auswirkungen der Verkehrsberuhigung in Innenstadtkanälen auf das Verkehrsverhalten (Bundesminister für Verkehr, Bonn)
- Sicherung der Ausfallreserve bei der Stromerzeugung (KFA Jülich GmbH)
- Fallstudie über die Umweltverträglichkeitsprüfung in der Bundesrepublik. (Umweltbundesamt)
- Soziale Reaktionen auf Maßnahmen zur Verkehrsberuhigung. Empirische Untersuchung in Berliner Straßen. (Senator für Bau- und Wohnungswesen)
- Implementierung von ENREF und ORDIS. (Umweltbundesamt, Berlin)
- Klassifikation von EG-Umweltinformationen. (Kommissionen der europäischen Gemeinschaften)
- Nutzwertanalyse für das Projektdesign Kabelkommunikation Berlin. Prof. Langenbacher, München

Forschungsvorhaben Bonn

- Rechtlich-Technische Fragen neuer Informationsmedien. GMD/Bonn
- DV-Unterstützung des staatsanwaltschaftlichen Geschäftsbetriebes. (Bayrische Staatskanzlei/Staatsanwaltschaft München I)
- Info-Aufbereitung für die politischen Entscheidungsgremien. (Internes Projekt)

Gesellschaft für Zukunftsfragen e. V.

Geschäftsstelle Berlin: Anschrift wie IFZ, Tel.: 030-8801-213
Büro Bonn: Leitung Ingrid Eichhorn-Molavi
Heussallee 20 · 5300 Bonn 1
Tel.: 0228-22 51 05

• Vorstand

Dr. Jürgen Bommer, Frankfurt/M. (stellv. Vorsitzender)
Prof. Dr. Walter Bückmann, Berlin
Dipl.-Ing. Lothar Juckel, Berlin
Dr. Heinz Markmann, Düsseldorf
Min.-Dir. Peter Menke-Glückert, Bonn (Vorsitzender)
Dr. Susanne Römer
Dr. Lothar Schulze, Hannover (stellv. Vorsitzender)

• Geschäftsführer

Hans Buchholz

• Ehrenmitglieder

Professor Dr. Ossip K. Flechtheim, Berlin
Professor Dr. Robert Jungk, Salzburg
Professor Dr. Heinz Hermann Koelle, Berlin

• Kuratoriumsvorsitzender

Professor Dr. Helmut Klages, Heidelberg

• Stellvertreter

Dr. Günter Friedrichs, Frankfurt/M.
Professor Dr. Rainer Mackensen, Berlin

• Kuratorium

Dr. Norman Alcock, Kanada
Dr. Bruno Anis, Frankfurt/M.
Professor Dr. K. Becher, Mainz
Professor Dr. K. H. Becker, Bonn
Professor Dr. Pierre Berteaux, Paris
Professor Dr. Peter von Blanckenburg, Berlin
Dipl.-Math. Jürgen Burstenbinder, Berlin
Dr. Hans Wolfgang Büttner, Frankfurt/M.
Professor Dr. Bruno Fritsch, Zürich
Dipl.-Ing. Emil Häberlin, Köln
Günther Heyder, Erftstadt-Liblar
Heinrich A. Hilgenberg, Köln
Dipl.-Kfm. Hannelore Illing, Berlin
Professor Dr. Otto Kimmich, Regensburg
Herbert Kundler, Berlin
Waldemar Lambrecht, Saarbrücken
Rudolf Luster, MdB, Berlin
Professor Dr. Helmut Maier, Berlin
Dr.-Ing. Reinhard Menger, Düsseldorf
Dr. Dieter Mertens, Nürnberg
Dr. Wolfgang Munde, Frankfurt/M.
Dr. V. Poremsky, Paris
Albert Räuber, Frankfurt/M.
Professor Dr. Bert V. A. Röling, Niederlande
Dr. Peter G. Rogge, Bielefeld
Klaus Rothgaenger, Regensburg
Professor Dr. Horst Ruprecht, Hannover
Oberreg. Rat Walter Schütze, Braunschweig
Dr.-Ing. Harro Trenkler, Frankfurt/M.
Professor Dr. Horst Wagendorf, Tübingen
Dipl.-Pol. Fritz Weise, Hamburg

Kommunikationszentrum für Zukunfts- und Friedensforschung

Gemeinnützige Gesellschaft mit beschränkter Haftung
de Haen-Platz 8, 3000 Hannover 1
Tel.: 0511-39 13 12

• Geschäftsführer

Peter-Kristian Ledig

• Wissenschaftlicher Leiter der Zukunftsworkstatt

Dipl.-Ing. Rüdiger Lutz M.A.

• Sekretariat

Hildegard Anschütz

Impressum:

Redaktion: Marion Kern (Chefredaktion), Hans Buchholz,
Dipl.-Bibl. Andreas Curtius, Dipl.-Ing. Dieter Kolb,
Professor Dr. Bernd Spahn.
analysen und prognosen über die welt von morgen,
Heft 72, 12. Jahrgang Nr. 6, November/Dezember 1980
Redaktionsbeirat: Dr. Ditha Brickwell, Professor Dr.
Walter Bückmann, Professor Dr. Ossip K. Flechtheim,
Professor Dr. Robert Jungk.

Vertrieb: Andreas Curtius
Jahresabonnement (incl. MwSt.): Institutionelle Bezieher
72,- DM, Private Einzelbezieher 42,- DM. Studenten mit
Studienbescheinigung 18,- DM. Herausg.: **Gesellschaft
für Zukunftsfragen e. V. – GZ**. In Zusammenarbeit mit
**Osterreichische Gesellschaft für langfristige Entwick-
lungsforschung (Zukunftsforschung)**, Wien, und
Schweizerische Vereinigung für Zukunftsforschung,
Zürich. Signierte und mit Namen versehene Beiträge
stellen nicht unbedingt die Meinung der GZ dar. Es gilt
Anzeigenpreisliste Nr. 6 vom 1. 4. 1977. **Bezugsbedin-
gungen:** Das Abonnement verlängert sich jeweils um
einen weiteren Jahrgang, falls nicht bis 8 Wochen vor
Jahresende gekündigt wird. Unverlangt eingesandte
Rezensionsexemplare werden nicht zurückgeschickt.
Druck: Enka-Druck GmbH, Rheinstraße 45, 1000 Berlin 41,
Telefon 852 40 08
Titelbild: Postkarte aus der Sammlung Clausen

72

HEFT

NOV/DEZ. 1980

Herausgeber:
GESELLSCHAFT FÜR ZUKUNFTSFRAGEN E. V.

FUTURES SURVEY

A Monthly Abstract of Books, Articles, and Reports Concerning Forecasts, Trends, and Ideas about the Future

A Publication of the World Future Society

Editor: Michael Marien



Volume 2, Number 10

October, 1980

CONTENTS

I. World Futures	80-833/80-842
II. International Economics	80-843/80-854
III. Food and Agriculture	80-855/80-866
IV. World Regions and Nations	80-867/80-876
V. Defense and Disarmament	80-777/80-892
VI. Politics and Administration	80-893/80-902
VII. Economy	80-903/80-917
VIII. Work	80-918/80-932
IX. Health	80-933/80-951
X. Science and Technology	80-952/80-964

HIGHLIGHTS IN THIS ISSUE

The following items may be of particular interest for their importance and/or originality:

- *80-867 *Antarctica: The Last Great Land Rush* (Peterson, *International Organization*)
- *80-874 *The Future of Muslim Civilization* (Sardar, Croom Helm)
- *80-882 *Nuclear Nightmares: An Investigation Into Possible Wars* (Calder, Viking)
- *80-883 *The First Nuclear War* (Borosen with Snyder, *Next*)
- *80-884 *Destruction of Nuclear Energy Facilities in War* (Ramberg, Lexington Books)
- *80-903 *Rationality, Economics and Culture* (Skolimowski, *The Ecologist*)
- *80-906 *The Economy in the 1980s* (Boskin, ed, Institute for Contemporary Studies)
- *80-918 *Work in an Era of Slow Economic Growth* (O'Toole, *Tech Forecasting & Social Change*)
- *80-922 *Women, Men, and the Division of Labor* (Newland, Worldwatch Institute)
- *80-934 *Health Care: Three Reports from 2030 AD* (Trend Analysis Program, American Council of Life Insurance)
- *80-943 *Life Extending Technologies: A Technology Assessment* (Gordon *et al*, Pergamon)
- *80-952 *Entropy: A New World View* (Rifkin with Howard, Viking)

I. WORLD FUTURES

80-833

Building the Future Order: The Search for Peace in an Interdependent World. Kurt Waldheim (Secretary-General, UN). Edited by Robert L. Schiffer (UN). NY: Free Press, May 1980/262p/\$12.95.

Contains the major speeches and reports given by Waldheim since first being elected as Secretary-General of the United Nations in 1971. The 47 selections are arranged in nine parts suggested by the UN Charter: to save succeeding generations, to maintain international peace and security, to reduce armaments, better standards of life in larger freedom, creating conditions of well-being, the dignity and worth of the human person, to solve international problems of a humanitarian nature, the highest standards of integrity, and harmonizing the actions of nations.

(Kurt Waldheim speeches and reports)

80-8.

Individual Values and Global Sharing. Earl R. Brubaker (Prof of Economics, U of Wisconsin-Madison). NY: New York U Press, Sept 1980/192p/\$17.50.

The growing need to cope more adequately with international problems such as terrorism, nuclear proliferation, arm races, violence, social degradation, and human destitution, ... become quite evident. This study aims at understanding rational allocation of resources and international organizational programs dealing with such problems. It describes the functions of such organizations from the perspective of the modern theory of collective micro-economics, and formulates a strategy of institutional evolution based upon it.

(organizations addressing international problems)

80-835

The Five Major Forces Affecting the World Today. Orville L. Freeman (President, Business International Corp), *Vital Speeches of the Day*, 46:22, Sept 1, 1980, 683-689.

Five basic global motivations or values stand out: 1) humanitarianism: the universal caring for others; 2) equalitarianism: a demand for a rough equivalent in the good things of life; 3) expectations: whereby people seek more for themselves; 4) participation in work and politics; and 5) nationalism: one of the continuing encroachments of the freedom of private business to operate in the world, involving taxation, regulation, and restriction. These values are not new; the new element is a world closely tied together by modern communications and transportation. At this time of strain and major adjustment,

Volume 12 Number 6

FUTURES

December 1980

CONTENTS

EFFACING THE POLITICAL FUTURE A response to INTERFUTURES	IAN MILES	436
THE INTERNATIONAL SYSTEM Limits to forecasting	PHILIPPE BRAILLARD AND PIERRE DE SENARCLENS	453
FUTURES RESEARCH AND POLICY FORMULATION The Spanish experience	FÉLIX ALVAREZ-MIRANDA AND EMILIO FONTELA	465
MODELLING BICOMMUNAL CONFLICT 1. Posing the problem	D. A. BOWERS, C. R. MITCHELL, AND K. WEBB	473
HYPERGAMES: DEVELOPING A MODEL OF CONFLICT	PETER G. BENNETT	489
BOOKS		508
THE PATTERN OF PREDICTION An enterprise of engineers	I. F. CLARKE	520
SCIENCE FICTION Deathless life or living death	DENNIS LIVINGSTON	527
PUBLICATIONS RECEIVED		528
CONFERENCES WFS global conference, Toronto		529
IIC annual conference, Ottawa	VINCENT PORTER	531
Wind propulsion for ships, London	J. F. FLEWITT	533
The EEC and information technology, London	ROBERT PARRY	535
INDEX		538

PUBLICATIONS

Managing Editor

William Page

Assistant Editor

Neil Stamper

Editorial Artist

Dale MacDonald

Institute for the Future Editors

Roy Amara and Andrew Lipinski

Futures Advisory Board

Daniel Bell Professor of Sociology, Harvard University, Cambridge, Massachusetts, USA

Gabriel Bouladon Grenoble, France

Asa Briggs Provost, Worcester College, Oxford, UK

James Bright President, Industrial Management Center, North Edgecomb, Maine, USA

Henry David Institute for the Future, USA

Yehezkel Dror Hebrew University of Jerusalem, Israel

H. W. Eldredge Dartmouth College, Hanover, New Hampshire, USA

E. Fontela Department of Econometrics, University of Geneva, Switzerland

Peter Hall Professor of Geography, University of Reading, UK

Olaf Helmer International Institute for Applied Systems Analysis, Laxenburg Austria; Professor Emeritus, University of Southern California, USA

Christopher Jones London, UK

Robert Jungk Berlin Centre for Futures Research, Berlin, West Germany

Herman Kahn Director, Hudson Institute, New York, USA

Hidetoshi Kato Tokyo, Japan

Hasan Ozbekhan Professor of Operations Research and Statistics and Member of Management and Behavioral Sciences Center, Wharton School, University of Pennsylvania; President, H. Ozbekhan and Associates, Inc, Philadelphia, USA

Keith Pavitt Senior Research Fellow, Science Policy Research Unit, Sussex University, UK

Gordon Rattray Taylor Bath, UK

Geoffrey Vickers Goring-on-Thames, UK

Institute for the Future Board of Trustees

Roy Amara Anthony Muzzicato

Harlan Cleveland Frank Pace Jr

Kenneth Craver H. Bruce Palmer

Henry David Michael Palmer

Guy H. Dobbs John Perkins

David Finn Samuel Schwartz

Raymond Fisher Carl Tucker

Walter A. Hamilton W. Brooke Tunstall

Mary Gardiner Jones Gus Tyler

David G. Moore George R. Vila

FUTURES is an international journal published six times a year, in February, April, June, August, October, and December. Annual subscription rate (six issues) £48 (UK, overseas); for private individuals £30 (UK, overseas). Single copies £9.50 each. Copies of FUTURES sent to subscribers in Canada and the USA are air-speeded for quicker delivery, \$124.80; subscription rate for private individuals, \$78. ISSN 0016-3287

Subscription enquiries and orders: IPC Business Press (Sales and Distribution) Ltd, Oakfield House, Perrymount Road, Haywards Heath, Sussex, RH16 3DH, England. Telephone: Haywards Heath (0444) 59188. Telex: Bisnespres Ldn 25137.

American representatives: IPC Business Press Ltd, 205 East 42nd Street, New York, NY 10017, USA. Telephone: (212) 867-2080.

Editorial office: IPC Science and Technology Press Ltd, PO Box 63, Westbury House, Bury Street, Guildford GU2 5BH, Surrey, UK. Telephone: Guildford (0483) 31261. Telex: 859556 Scitec G.

Managing Director: A. A. Smailes

Contributions for publication in FUTURES should be sent to the editor (address above).

Copyright: Readers who require copies of articles published in this journal may either purchase reprints or obtain permission to copy from the publisher at the editorial office (address above). For readers in the USA, permission to copy is given on the condition that the copier pay the stated per copy fee through the Copyright Clearance Center Inc, 21 Congress Street, Salem, MA 01970, for copying beyond that permitted by Sections 107 and 108 of the US Copyright Law. Fees appear in the code at the foot of the first page of each article.

US mailing agents: Expeditors of the Printed Word Ltd, 527 Madison Avenue, Suite 1217, New York, NY 10022. Second-class postage paid at New York, NY.

Printed in England by Adlard & Son Ltd, Bartholomew Press, Dorking

PUBLICATIONS

futuribles

n° 41 - février 1981

Mahdi Elmandjra	3	<i>L'africanisation de l'Afrique</i>
Jean-Philippe Barde	17	<i>La réparation des dommages à l'environnement : vers la définition d'un nouveau droit ?</i>
Joël Le Quément	33	<i>Robots industriels : stratégies et enjeux</i>

Forum

	54	<i>Perspectives d'emploi dans les services</i>
Alain Fillion	63	<i>Adapter l'enseignement aux disciplines de demain. Le cas de l'informatique et des microprocesseurs</i>

Futur-informations

	71	<i>Les nouvelles de la prospective</i>
	73	<i>Les actualités prospectives</i>

Bibliographie

	81	<i>Analyses critiques</i>
	90	<i>Comptes rendus</i>
	94	<i>Vient de paraître</i>

futuribles

Revue mensuelle de l'Association Internationale Futuribles
55, rue de Varenne, 75007 Paris, France — Tél. 222-63-10

COMITÉ D'ORIENTATION

Ismail S. ABDALLA, Michel ALBERT, Serge ANTOINE, Göran BACKSTRAND, Bernard CAZES, Michel CROZIER, Jacques DURAND, François ECK, Emilio FONTELA, Claude GUILLEMIN, Paul-Marc HENRY, Bertrand de JOUVENEL, Edmond LISLE, Daniel MALKIN, Eléonora MASINI, Henri MENDRAS, Pierre MASSÉ, Aurelio PECCEI, Pierre PIGANIOL, Jean SAINT-GEOURS, Michel SALOMON, Philippe de SEYNES, Georges VEDEL.

DIRECTEUR

Hugues de JOUVENEL

RÉDACTION

Christine de GUEBRIANT, Guy POQUET

DIFFUSION

Francine LEBLANC

ABONNEMENT (un an) : France, 230 FF / Etranger : 250 FF
Envoi par avion sur demande, port en sus.

LE NUMÉRO : 25 F

Les articles signés expriment l'opinion des auteurs et pas nécessairement celle de l'Association Internationale Futuribles. Tous droits de reproduction même partielle, par quelque procédé que ce soit, réservés pour tous pays.

© Association Internationale Futuribles 1981
SIRET : n° 784.314.940.00049 — ISSN 0183 701 X

Commission paritaire n° 56798
Publié avec le concours du CNRS

sofiac paris - Dépôt légal N° 5118 - Février 1981

Photos : Christine Poquet p. 2, Guy Poquet p. 6,
Rapho pp. 11, 21, 28, Renault pp. 35, 51

THE FUTURIST

a journal of forecasts, trends
and ideas about the future.

Editor: Edward S. Cornish
Associate Editor: Jerry Richardson
Assistant Editor: Robert Selim
Research Director: Lane Jennings
Staff Editor: Ellen Dudley
Staff Writer: Frances Segraves
Magazine Art Director: Carol Wade
Society Art Director: Roy Mason
Staff Photographer: Mico Delanava
Chairman, Advisory Editorial Board: Julius Cahn

Contributing Editors: Clement Bezold (Government); Sally Woodhull Cornish (General); Elliott Fraengle (Peace Research); William T. Gay (Utopias); Ralph Hamil (General); Barbara Hubbard (Images of Man); John Huss (General); Joseph F. Martino (Technological Forecasting); Roy Mason (Architecture); Jay S. Mendell (Innovations); David P. Snyder (Life-styles); John Waring (Technological Trends); Elizabeth Williams (Law)

Circulation: Peter Zuckerman

General Advertising: J.E. Publishers' Representative Co., 8732 Sunset Blvd., 4th Fl., Los Angeles, CA 90069, U.S.A. (213) 659-3810

Classified Advertising: Peter Zuckerman, THE FUTURIST, 4916 St. Elmo Ave., Washington, D.C. 20014, U.S.A. (301) 656-8274.

THE FUTURIST is published bimonthly by the World Future Society: An Association for the Study of Alternative Futures. The Society is a nonprofit educational and scientific organization founded in 1966. Articles in Society publications reflect the views of their authors or persons quoted. The Society acts as an impartial clearinghouse for a variety of different views and does not take positions on what will happen or should happen in the future.

Directors: Arnold Barach, Executive Director, *Changing Times* Magazine; Orville L. Freeman, President, Business International Corporation; Barbara Hubbard, Organizing Director, Committee for the Future; Sol M. Linowitz, Senior Partner, Coudert Brothers, formerly Chairman of the Board, The Xerox Corporation; Michael Michaelis, Senior Consultant, Arthur D. Little, Inc.; Glenn T. Seaborg, University Professor of Chemistry, University of California at Berkeley, formerly Chairman, U.S. Atomic Energy Commission; Rowan A. Wackett, Principal, Wakefield Washington Associates, Inc., formerly Vice President, Aspen Institute.

Officers: Edward S. Cornish, President; Frank Snowden Hopkins, Vice President; Peter Zuckerman, Secretary-Treasurer; William C. Moore, General Counsel; Hollis B. Vail, Audio Chairman; Gregg Edwards, Director of Professional Activities; Howard F. Didsbury, Jr., Director of Special Studies; Michael Marien, Director of Information Services; Sally Woodhull Cornish, Program Coordinator.

Staff: Membership Department—Susan Echard (Director); Book Service—Julia Larson (Director); Administration—Joan McAlar (Office Services); Virginia Kenney (Administrative Assistant); Receptionist—Mary Kay Kenney; Traffic Department—Jefferson Cornish (Manager); George Englund, Margaret Rainey.

United Nations Representative: Robert Delaney, c/o Philip Morris, Inc., 100 Park Avenue, New York, New York 10017, U.S.A. Co-Representative: Ralph Hamil.

Subscription: For individuals: One year—\$18; two years—\$33; three years—\$46. For libraries: One year—\$21; two years—\$38; three years—\$53. Payment may be made in U.S. currency or the equivalent in other currency. No additional charge is made for overseas postage. Subscribers to THE FUTURIST are members of the World Future Society, a nonprofit educational organization. Eighty percent of dues is designated for magazine subscription. Information on Society membership is included in each issue of THE FUTURIST.

Single copy price: \$3.00. Multiple copy rates: 5-9 copies @ \$2.50; 10-19 copies @ \$2.25; 20-49 copies @ \$1.75; 50-99 copies @ \$1.50; 100 or more copies @ \$1.25. For classroom use, please make inquiry.

Back Issues: THE FUTURIST has been published in February, April, June, August, October, and December of each year, starting with 1967. Early issues have been reprinted so that all back issues are available. The price of back issues is \$3.00 per issue or \$15 per year (volumen).

Address all mail to

WORLD FUTURE SOCIETY
Post Office Box 30369
Bethesda Branch
Washington, D.C. 20014 • U.S.A.

Second class postage paid at Washington, D.C., and at additional mailing offices. Headquarters: 4916 St. Elmo Ave (Bethesda), Washington, D.C. 20014 • U.S.A. Telephone (301) 656-8274.

Copyright ©1981 World Future Society
All rights reserved.

Feature Articles

3 The Big Generation: What's Ahead for the Baby Boomers?

by John Kettle

Between 1951 and 1966, Canada experienced an incredible baby boom—perhaps the biggest of any nation. The boomers now face a shortage of jobs and housing—and dismal pension prospects in their retirement years.

14 The Acceleration of Evolution

by John Platt

Life on earth is nearing "the greatest turning point in four billion years," says a noted humanistic scientist.

25 The Futures Field: Searching for Definitions and Boundaries

by Roy Amara

The president of the Institute for the Future describes what futurists do and offers a definition of what comprises the "futures field."

30 The New Industrial Revolution: How Microelectronics May Change the Workplace

by Colin Norman

Phenomenal advances in microelectronic technology have touched off a "Second Industrial Revolution" that promises to improve productivity, but threatens thousands of jobs.

44 Disappearing Jobs: The Impact of Computers on Employment

by Bruce Gilchrist and Arlaana Shenkin

Two researchers report on what happened to a group of New York typesetters who lost their jobs due to technological change and suggest ways to minimize such casualties in the future.

51 The World's Trashiest People: Will They Clean Up Their Act or Throw Away Their Future?

by Arthur H. Purcell

The United States seems, at times, to be built on waste, but the "throwaway society" cannot thrive in an era of increasing resource scarcities. The shift needs to begin now to a low-waste society that stresses conservation while sustaining a high standard of living.

73 Five-Year Author/Title Index to THE FUTURIST

Every signed article that has appeared in THE FUTURIST from February 1976 through December 1980 is included in this handy index. In the title index, the articles are arranged sequentially within 27 broad subject areas; in the author index, the articles are listed alphabetically by the author's last name.

World Trends and Forecasts

- 65 Education
- 68 Environment
- 68 Work
- 69 Business

2 Tomorrow in Brief

Front Cover: Artist's concept of the acceleration of evolution. "In place of natural selection, human beings have become the conscious agents of sudden and radical evolution—the biggest evolutionary jump in four billion years," says John Platt in the article beginning on page 14.

Cover art by Susan Strok

Technological Forecasting and Social Change

An International Journal

Volume 18, Number 1, September 1980

Contents

	The Global 2000 Report to the President: Entering the Twenty-First Century	1
DAVID HOPCRAFT (Nairobi, Kenya)	Nature's Technology	5
ALVIN JAY HARMAN (Laxenburg, Austria)	Industrial Innovation and Governmental Policy: A Review and Proposal Based on Observation of the U.S. Electronics Sector	15
JENNIFER M. ROBINSON (Laxenburg, Austria)	Technological Learning, Technological Substitution, and Technological Change	39
JOSHUA MENKES (Washington, DC)	Justice and Fairness in the Technological Order	51
PETER GÄRDENFORS and BENGT HANSSON (Lund, Sweden)	Forecasting Nonstationary Time Series— Some Methodological Aspects	63
SELMO TAUBER (Portland, OR)	Applications of the <i>p</i> -Similarity Method to Forecasting	77

Conference Report

KISH J. SHARMA (Sacramento, CA)	First National Convention on Futurology	83
---	---	----

Book Reviews

HILARY EWING (Berkeley, CA)	<i>The Seventh Year, Industrial Civilization in Transition</i> (Jackson Davis)	87
HILARY EWING (Berkeley, CA)	<i>Practical Technology Forecasting, Concepts and Exercises</i> (James R. Bright)	89

Technological Forecasting and Social Change

An International Journal

Senior Editor:

Harold A. Linstone
Director, Futures Research Institute
Portland State University
PO Box 751
Portland, Oregon 97207

Associate Editors:

Joseph Martino
Research Institute
University of Dayton
300 College Park Drive
Dayton, Ohio 45469

Frederick Rossini
Technology and Science Policy Program
School of Social Sciences
Georgia Institute of Technology
Atlanta, Georgia 30332

Advisory Board

Marvin Adelson
School of Architecture
and Urban Planning
University of California
Los Angeles, California 90024

Gerhart Bruckmann
Institut für Statistik
Universität Wien
Rathausstrasse 19
A-1010 Wien, Austria

Ida Hoos
Space Sciences Laboratory
University of California
Berkeley, California 94530

Ilya Prigogine
Service de Chimie Physique II
Code Postal No. 231
Campus Plaine U.L.B.
Boulevard du Triomphe
1050 Bruxelles, Belgium

Robert U. Ayres
Dept. of Engineering
and Public Policy
Carnegie Mellon University
Schenley Park
Pittsburgh, Pennsylvania 15213

Marvin J. Cetron
President, Forecasting
International, Ltd.
1001 North Highland Street
Arlington, Virginia 22209

Yoichi Kaya
Department of Electrical
Engineering
The Faculty of Engineering
University of Tokyo
Bunkyo-Ku, Tokyo, Japan

Edward B. Roberts
Sloan School of Management
Massachusetts Institute of Technology
50 Memorial Drive
Cambridge, Massachusetts 02139

A. Wade Blackman, Jr.
Stone & Webster Engineering
Corporation
P.O. Box 2325
Boston, Massachusetts 02107

Kan Chen
Professor of Electrical and
Computer Engineering
University of Michigan
Ann Arbor, Michigan 48109

Cesare Marchetti
International Institute for Applied
Systems Analysis
2361 Laxenburg, Austria

Devendra Sahal
Graduate School of Business
New York University
100 Trinity Place
New York, New York 10006

Mihai C. Botez
Institute of Mathematics
University of Bucharest
Str. Academiei 24
Bucharest 70109, Romania

Joseph F. Coates
JF Coates, Inc.
1738 Kanawha Street, N.W.
Washington, D.C. 20015

Eleonora Masini
World Futures Studies Federation
Casella Postale 6203
Roma Prati, Italy

M. Nawaz Sharif
Regional Computer Center
Asian Institute of Technology
P.O. Box 2754
Bangkok, Thailand

Wayne I. Boucher
Center for Futures Research
Graduate School of Business
Administration
University of Southern California
University Park
Los Angeles, California 90007

Norman C. Dalkey
Systems Engineering Department
School of Engineering and
Applied Science
University of California
Los Angeles, California 90024

Donald N. Michael
Professor of Planning
and Public Policy
University of Michigan
Ann Arbor, Michigan 48109

W.H.C. Simmonds
National Research Council
of Canada
Ottawa, Ontario K1A 0R6, Canada

James R. Bright
President, Industrial
Management Center, Inc.
River Road
North Edgecomb, Maine 04556

Gennady M. Dobrov
Institute of Cybernetics
Academy of Sciences of the
USSR Kiev, USSR

Ian I. Mitroff
Graduate School of Library
and Information Sciences
University of Pittsburgh
Pittsburgh, Pennsylvania 15260

William L. Swager
Battelle Memorial Institute
Columbus, Ohio 43201

Harrison Brown
East-West Resource
Systems Institute
The East West Center
1777 East West Road
Honolulu, Hawaii 96848

Olaf Helmer
26180 Valley View
Carmel, California 93921

Aurelio Peccei
President, The Club of Rome
163 via Giorgione
00147 Rome, Italy

Murray Turoff
Computer Sciences Department
New Jersey Institute of Technology
323 High Street
Newark, New Jersey 07102

Francis P. Hoerber
Hoerber Corporation
5151 Williamsburg Boulevard
Arlington, Virginia 22207

Karol Pelc
Futures Research Center
Technical University of Wrocław
Wybrzeże Wyspiańskiego 27
50 370 Wrocław, Poland

Edward Wenk, Jr.
Program in the Social
Management of Technology
University of Washington
316 Guggenheim ES-15
Seattle, Washington 98195

TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE is published monthly in three volumes by Elsevier North Holland, Inc. Institutional subscription: \$150.00 per year (12 issues). Foreign subscribers: Please add \$12.00 for postage and handling outside the U.S.A. Air mail postage to Europe and Canada: \$30.00; all other countries: \$48.00. Duplicate copies will not be sent to replace ones undelivered through failure to notify Elsevier of change of address. Claims for missing numbers can be honored only up to 60 days from the date of issue. Single copy price and back issue information supplied upon written request. Address orders and correspondence to: Michael Torzewski, Subscription Department, Elsevier North Holland, Inc., 52 Vanderbilt Avenue, New York, NY 10017. Advertising inquiries should be addressed to: Kit Simon-Ash, Journal Advertising Coordinator, Elsevier North Holland, Inc., 52 Vanderbilt Avenue, New York, NY 10017.

© Elsevier North Holland, Inc., 1980. All rights reserved. Second class postage paid at New York, NY, and at additional mailing offices. No. 980340. Manufactured in the United States.

This journal has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition that the copier pay through the Center the per copy fee stated in the code on the first page of each article for copying beyond that permitted by the U.S. Copyright Law. If no code appears on an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1978 may be copied for a per-copy fee of \$1.00, also payable through the Center. This consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotional purposes, or for creating new collective works.

BILL-BOARD

DEATH OF AN INNOVATOR

By Magoroh Maruyama

On December 12, 1980, Erich Jantsch succumbed at the age of 51 to the material and physical hardships which worsened progressively during the last decade of his prolific and still young life.

This makes us realize again the harsh and brutal conditions of life which some of the innovators must endure. The romantic notion of heroic geniuses overcoming all obstacles and adversities is unrealistic. Innovators are often confronted with social and material obstacles unknown to those who pursue more usual careers.

Let us face squarely the fact that Jantsch was given no paid academic job during a decade of his residence in Berkeley - a town considered to be a foremost cradle of scientific and philosophical innovations. And the books he authored, while highly and internationally acclaimed among a small number of avant-garde thinkers, were by no means widely appreciated. His EVOLUTION AND CONSCIOUSNESS was selling only a few dozen copies per year.

He lived in a one-room semi-apartment in an old sub-standard building on University Avenue. He had no visible furniture, and he could put all his possessions, including his small old typewriter and some books, in a small closet. How he was able to survive was almost a mystery. He was suffering from hip joint or muscle pains, and by the end of 1978 he could hardly walk across the campus without great discomfort.

That he enjoyed his intellectual life immensely was beyond question. But he was not happy with his material and financial situation. He said often that he was not eligible for most of the research grants because he held no academic position. I remember suggesting him, in 1977, that he might explore the possibilities of working for Wright Institute. When I mentioned that everybody at Wright Institute has a part-time appointment and probably receives less than \$1,000 a month, his face lit up and he said beamingly; "I can live on that". I introduced him to Nevitt Sanford, the founder and then still the President of Wright Institute.

BILL-BOARD

Eventually some part-time teaching arrangement was promised. But due to administrative complications, he was paid only what amounted to be a token honorarium when he began to teach in 1978. He was a good-natured teacher whom his students enjoyed. But privately he confided me his anger and dissatisfaction regarding the way his pay ended up to be only a small fraction of what was originally proposed to him. After Joseph Meeker established his Strong Center, I introduced Jantsch to Meeker in 1979. By that time Jantsch was skeptical and cautious. He asked me: "Is the Center really strong?"

In spite of all his sufferings and frustrations, at his death bed he prepared the following statement: "Erich Jantsch died on _____ in Berkeley after a painful illness. He was almost 52 and grateful for a very rich, beautiful and complete life. His ashes have been scattered over the sea, the cradle of evolution" He left the date blank to be filled after his death.

In interpreting it, we should not be overly romantic. We must realize that he really suffered, even though he did not show it to many people. We must face the stark fact that he was for many years a victim of the high academic and financial mortality rate inflicting many innovators, and that he could have lived much longer under less adverse conditions. To forget this fact is to waste the expensive lesson from his unnecessarily early death.

o o o

Harold Cleveland has been appointed from August 1st 1980 Director of the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

Address:
Hubert H. Humphrey Institute of Public Affairs
909 Social Sciences
267 19th Avenue South
University of Minnesota
Minneapolis, MN 55455, USA

o o o

TWO PROPOSALS FOR CONFERENCES

1. Beechwood College
Beechwood College, Elmete Lane
Roundhay, Leeds LS8 2LQ
Telephone (0532)720205

Beechwood College is the educational, research and

BILL-BOARD

resource centre for the Industrial Common Ownership Movement. ICOM is the national network for enterprises that are wholly owned and controlled by the people who work in them. For further information about ICOM please contact the Organising Secretary of ICOM c/o Beechwood. His telephone is (0532)641235.

o o o

2. OMNIA MUNDI
Foundation for Worldwide Nonviolent Collective Action
for the Survival of All Races

We are willing to lend it to your associates for conferences and congresses, from spring to autumn. We do it more out of humanitarian reason and will charge only low nominal fees.

A representative conference-room and other facilities are at your disposition.

The palace is on the shores of Lake Como, on the top of a terrace-park.

For further information:

Oscar Kiss Maerth
Villa Passalacqua
22010 Moltrasio (Como), Italy
Tel: (031)29 03 73
Telegr.: Maerth Moltrasio