

Founding Editor: F. de Hanika · Editor: Stephen Sokoloff · International Federation for Systems Research Schottengasse 3, A-1010 Wien, Austria Electronic Mail: K 323390@ aearn. Bitnet. Systems Research.



PROF. STUART A. UMPLEBY

Negotiating Procedures and **Underlying Ethical Convictions** in the Soviet Union and the USA

Prof. Stuart A. Umpleby Department of Management Science George Washington University Washington D.C., 20016, U.S.A.

and

Visiting Research Fellow, Austrian Society for Cybernetic Studies, Vienna

In the light of his own personal experience the author describes fundamental differences in Soviet and American processes of conflict resolution. These, as he proceeds to demonstrate, have deep cultural roots; the basic assumptions concerning morals are different in both societies. Now under Gorbachev, however, the Soviets are changing, they are becoming much more frank and open.

I became interested in the topic of this paper when I was involved in arranging conferences between Soviet and American scientists in the fields of cybernetics and systems theory. When I first began working with Soviet scientists nine years ago, I assumed that scientific conferences involving Americans and Soviets would proceed in a fashion similar to meetings I had experienced among academics from North and South America, East and West Europe and Japan. Although I expected some difficulties due to the super-power rivalry, I was shocked by the magnitude of the differences between the thinking of Americans and Soviets about topics such as the relationship of politics to science.

In order to comprehend the reasons for this disparity, I began to study Soviet history and culture. Learning about Marxist-Leninist thought helped me to understand the terms the Soviets were using and their frame of reference. But the theory that I found most useful in my interactions with Soviet scientists was that of two systems of ethical cognition formulated by a Soviet émigré mathematician and psychologist, Vladimir Lefebvre (1982).

An Example of Cultural Differences

On most matters I found that working with Soviet scientists was not greatly different from dealing with scientists from any other country. However, when an issue of political importance arose, I discovered that Soviet scientists negotiated in a way that was dramatically different from that I was accustomed to. (I should note here that the experiences I am about to describe occurred before Mikhail Gorbachev came to power in 1985.)

When an American begins a negotiation, he will often lead off with a conciliatory statement, thereby indicating his willingness to compromise and to reach agreement. A Soviet negotiator usually begins with a confrontational statement, indicating his commitment to principle and his determination not to compromise on vital issues. As a result of these opening statements Americans tend to conclude that the Soviets are aggressive, impolite, and unwilling to negotiate seriously. The Soviets are likely to conclude that the Americans are weak, not committed to their principles, and unprepared to negotiate seriously.

Not only do Americans and Soviets have different ways of initiating a negotiation; they also have different ideas of how it should proceed. Americans begin by indicating the area in which an agreement might be possible. They expect the other side to do the same. The region of overlap then becomes the focus of attention. The rest of the negotiation

is envisioned as a process of clarification, wording, and working out of details. At the end of the process the negotiators are left with the satisfying feeling that they have jointly constructed a mutually acceptable agreement. This cooperatively produced success is interpreted as a sign that relations are improving and will continue to do so.

When Soviets negotiate, they envision a different process. One side's opening statement defines issues on which no compromise is possible. They expect the other side to make a similar statement. A Soviet negotiator will look closely at what has not been ruled out. He will then state another issue on which compromise is not possible. He expects his "opponent" to do likewise. This dialogue in ultimatums continues until a situation has been defined that neither side has ruled out. This remainder becomes the de facto agreement. The feelings at the end of a Soviet negotiation are completely unlike those at the end of an American negotiation. Each side can consider itself victorious since it never compromised. At the end of a Soviet negotiation there is a feeling of exhaustion mixed perhaps with relief that a long and hard-fought struggle has had a satisfactory outcome. Rather than a feeling of friendliness among negotiators at the end of the talks, the most that can be achieved in a Soviet negotiation is grudging respect for a skilled and committed adversary.

Lefebvre's theory of ethical cognition helped me to understand why Americans and Soviets negotiate in such different fashions. Lefebvre suggests that there are two systems of ethical cognition and that one is dominant in the West while the other is dominant in the Soviet Union, at least the Soviet Union up to 1985. Imagine a case involving a conflict between means and end. According to the first ethical system a good person is one who will not use bad means to achieve good ends, whereas according to the second ethical system a good person is one who will pursue a good end even if the means are bad. Paradoxically a person who is not willing to compromise by using bad means tends to be willing to compromise with others, while one who is willing to compromise in his choice of means tends to be in conflict with others. The difference is similar to the one between civilian and military ethics. In the former the commandment is, "Do not kill". In military ethics killing is permitted in order to attain a military objective. A civilian hero assumes peaceful relations and is willing to compromise. A military hero assumes conflict and refuses to compromise.

Changes in Moral Reasoning

After Gorbachev came to power in 1985 our discussions changed dramatically. The style of conversation became more open and frank, and the content of conversation changed to include large-scale social experiments, in addition to the previous topics of epistemology, methodology and management (Umpleby, 1987). But as the Soviets began to express increased interest in American management methods, I found that I had doubts about the applicability of these in the Soviet context. These methods are based upon assumptions about human nature and the role of government which are markedly different from those I had been learning about by studying Soviet society. I then encountered a paper by Richard Graham (1988) in which he suggested that Gorbachev's reforms had only been able to occur as a result of the fact that the Soviet people had already moved to different patterns of reasoning.

Graham's paper was based on a theory which has been proposed by Lawrence Kohlberg. He suggests that there are five stages of moral reasoning.

- 1. The first is characterized by respect for authority and fear of punishment. A command economy might be an example.
- 2. The second is suitable for exchange relationships in a market place. Each side gives something that the other wants. A barter system would be an example.
- 3. The third stage of reasoning is oriented primarily toward peer pressure and the desire to belong by conforming to the standards of community. An emphasis on national identity would be an example.
- 4. The fourth stage of reasoning is concerned with law and order. Attention is focused on the idea that society operates more effectively when people obey the law. Survey research has shown that this type of reasoning is widespread only among people in democratic, industrialized societies.
- 5. The fifth stage is achieved only by a minority of people in the more economically advanced countries. This type of reasoning recognizes that laws are sometimes unjust and need to be changed. Strategies of nonviolent resistance, as practiced by Mahatma Gandhi or Martin Luther King Jr., would be examples.

According to Kohlberg the stages of reasoning develop in series as a person matures. The sequence is always the same, and no stage can be skipped. Furthermore, one can obtain an indication of the level of development of a society by looking at the average stage of reasoning achieved by adults in it.

Using Kohlberg's theory Graham suggested that the rise of Gorbachev as a leader and his survival in office reflected the fact that the Soviet population and Soviet intellectuals had reached a level of reasoning which permitted the reforms that Gorbachev was proposing. The success of the economic reforms in the Soviet Union and in other socialist countries may depend upon how much the thinking of the population has departed from the type propagated by the Stalinist system and upon the pace of additional cultural change. Kohlberg's theory has helped me to understand how the cultural development of a society might be measured and how the institutional arrangements in a country reflect the level of cognitive development of its inhabitants. Although there has been much discussion of the economic reforms needed in the socialist countries. there has been less consideration of which cultural changes are needed, if indeed the socialist countries intend to adopt Western economic and management methods.

Perhaps I should mention at this point that for many years social scientists assumed that political and economic systems may change but cultural systems remain relatively constant. This is quite different from the view advocated in recent years by business consultants who attempt to change corporate culture as a means of increasing productivity. For example, in companies experiencing strikes and distrust between management and labor, they work to increase openness and communication. I believe it may be possible to use some of the methods recently developed to facilitate cultural change in nations as well as in corporations.

My view is that an economy is based upon a cultural foundation. Now that the political constraints on socialist economies have been greatly relaxed, cultural constraints, such as attitudes toward private property, entrepreneurship and confrontation, will determine the pace of economic reforms. It seems to me that an economy cannot change fundamentally without major alterations in cultural beliefs either before or during the reform process.



PROF. ENRIQUE G. HERRSCHER

THE ICE CREAM MODEL

A model showing how the incorporation of parts into a larger entity enhances their value — or why the price of an ice-cream cone is not proportional to its size.

Enrique G. Herrscher San Martin 551 - piso 4° Ofic. 44 1004 Buenos Aires, Argentina

Some time ago (summer 1989) this NEWSLETTER published my article, "The Wave-tide Model". In a similar /ein, I now want to present a metaphor of another well known systems problems: the determination of the "value of synergy": by how much may the "value" of a system exceed the sum of the values of its parts.

In my country, Argentina — and probably in most other parts of the world — ice cream is sold in various sizes and at various prices; let us say that a 3 oz cone (a) is sold at the equivalent of one dollar; a 5 oz one (b) at US \$ 1,50; and an 8 oz (c) cone at two dollars.

I have always been intrigued by the quantitative implications of these different size-price combinations. For instance: could I get 2 oz of ice cream (the difference between sizes a and b) at 50 cents (the difference between prices a and b)? Or: Why should (c), that weights (a + b), cost two dollars, instead of US \$ 2,50 (prices a + b)? Even disregarding the indirect expenses and the cone itself as irrelevant here, there is obviously no proportionality when comparing "whole entities".

The small amounts involved prevented me from pursuing this research. However, some years ago I faced this same problem again, but on that occasion it involved several million dollars. Working for ITT, I was coordinating the economic aspects of a manufacturing and technology transfer proposal for CANTV, the Venezuelan state-owned telephone company. CANTV, at that time one of the toughest and most intelligent buyers I have ever encountered, wanted a detailed description of the different manufacturing levels a factory of telecommunication equipment might cover. What they required, in order to make their choice of an optimal level of integration, was an analytical ice cream model!

The manufacture of central office equipment (COE) was at that time visualized in the form of a complex cost "tree up" consisting of raw materials, primary parts, secondary parts, components, subassemblies, assemblies and final switching equipment to be installed in a central office. Each of those categories had subdivisions and alternative compositions; therefore it was possible — depending on the technology — to define more than those seven levels, while on the other hand one could bypass certain levels for instance subassemblies — and thereby reduce their number.

The further upstream the manufacturing integration extended, the more profound the technology transfer would be, and the bigger and more complex the factory which would have to be built. Conversely, the more downstream the Venezuelan authorities defined the integration level for instance, just assembling subassemblies — the simpler the transformation process they would have to learn and carry out, but the more they would have to buy.

This gradual disaggregation posed the same problem as the ice cream decomposition exercise. Starting from an elementary basic structure A + B = C, the value of C certainly was not the sum of the values of A and B. When selling parts or portions of a technology that has been developed as a whole, the value pertaining to a whole, the "price of synergy", would have to appear somewhere.

Using yet another metaphor, I will call that difference "goodwill". Most non-accountants — and many accountants as well — may be surprised by my using this term. The concept is generally utilized in cases of acquisition, merger or divesture, in order to establish the amount by which the value of a going concern exceeds its book value.

Now the "book value" is essentially a "sum of parts": the aggregate of the diverse assets a corporation owns (plant, property & equipment, inventory, accounts receivable, etc.) less the liabilities it owes to third parties. This difference is called the "net worth". But on the other hand, for someone acquiring a going concern its "real net worth" is not the difference between what the company owns and what it owes, but its ability to produce future earnings. This ability is a true systemic concept, for it is not derived from the isolated parts, but from the interaction among them.

In actual practice, two approaches to goodwill are used. The more academic view defines it as "the intangible possession that enables a business to continue to earn a profit in excess of the normal or basic rate of profit earned by other business of similar type" (J. M. Rosemberg: Dictionary of Business and Management, Wiley, New York, 1978). The more practical view defines it as the difference between the "capitalized value of earning power" (Lexique, Union Européene des Experts Comptables, Economiques et Financiers, UEC, Düsseldorf, 1964) and the said Net Worth. As this is not an article about accounting, the characteristics and comparative merits of these two approaches will not be discussed here. It suffices to say that for our present purpose — the metaphorical use of an accounting concept — the second approach is more applicable.

Coming back to the example of telephone equipment technology transfer, the starting point was the "capitalized value of earning power" of the whole system, the "C" of the above basic structure. Let us now assume that the numerous parts that, at different levels, form C, are simply A and B. The value of A will then be C less an "adjusted" B, as follows: A = C - B + (Br - B) or A = C - 2B + Br; and the value of B = C - 2a + Ar.

The factor "r" denotes the difference between the "systemic value" of a part of a system, i.e. its value when "functioning within a system", and its "isolated value". The sum of these "isolated values" of the parts is equivalent to the Net Worth concept in accounting, while the sum of the "systemic values" exceeds the value of the system as a whole, because of duplications that occur when one decomposes the full value of the parts of a whole.

It is not the purpose of this article to develop mathematical formulas for such a "value tree up" of the actual example, but rather to present some basic rules of our so-called "ice cream model":

- Whenever elements such as A and B form part of a system C, three types of values appear: the value of the isolated parts A and B; the value of the whole system C; and the value of the parts as pertaining to said system, Ar and Br.
- In most cases, i.e. when the system enhances the value of the parts, C will be more than A + B, the difference being what we call the "value of synergy" or "goodwill".
- 3) This difference derives from a dissimilar focus when assigning value to a system and to its parts. Speaking in accounting terms, the parts are worth what they **are** and the system is worth what it **does**.
- 4) Knowing the values of the isolated parts A and B of the system C and that of the resulting difference or "goodwill" is not enough. Often we need to divide the "goodwill among the parts, as opposed to regarding it as an indivisible entity.
- 5) In other words, we need to know Ar and Br: the "systemic values" of the parts, i.e. the sum of their intrinsic value plus the advantage of their being linked to the whole.
- 6) The coefficient r assumes a new value at each level of disaggregation. This is because the system advantages are spread over all the parts in relation to their "contribution to synergy".
- 7) Therfore, the "systemic values" of the parts that constitute a system cannot be added: while C is more than A + B, Ar + Br is more than C.

The above analysis does not imply that "values" should be considered exclusively from an economic viewpoint. On the contrary: the example chosen is merely a single one, and these concepts should also be applicable to less quantifiable, soft systems. At any rate, we now know why the prices of ice cream cones will never be proportional to their sizes ...

PUBLICATIONS

1) A NEW JOURNAL

SISTEMICA (appears twice a year)

Concerned with the inter- and transdisciplinary management of complexity. Its main theme is the application of systems ideas to current problems in the Latin American cultural context, but it also includes articles on other topics. We invite you to submit papers on:

- Analysis of design methodologies of information systems
- Cybernetics
- Data bases
- Decision support systems
- Expert systems
 Holistic medicine and health systems
- Law systems
- Operations research
- Political systems
- Socio-cultural systems
- Socio-technical systems
- Soft systems methodology
- Strategic and control management systems
- Systems analysis
- Systems dynamics
- Systems engineering

Abstracts must be typed (double-spaced) on A4-size paper.

CONTENTS OF VOL. 1 No. 1

Editorial, R.A. Rodriguez-Ulloa, Peru

THEME I. Social Systems

Social Systems and Quality of Life, R. Rodriguez-Delgado, Spain.

The Wave-Tide Model, E. Herrscher, Argentina.

THEME II. Management Systems

The Systems Movement and the "Failure" of Management Sciences, P.B. Checkland, England.

Present Situation and Future Prospects of Management Science, M.C. Jackson, England

A First Approximation of Beer's Model in a Peruvian Enterprise. J. Quispe and D. Ritchie, Peru.

Methodology for Defining Weltanschauungen (M-D-W): An Intervention in a Peruvian Enterprise, R.A. Rodriguez-Ulloa, Peru.

THEME III. Holistic Medicine

Systemic View of Traditional Medicine: Its Liaison and Differences with the Principles of Scientific Medicine, F. Cabieses, Peru.

THEME IV. Socio-Cultural Systems

The Informal System and the Socio-Cultural Values of the Peruvian: Divergences and Affinities, J. Fernandez-Baca, Peru

Understanding the Organizational Culture: A Soft Systems Perspective, L. Davies, England.

Cybernetics and Andean Agriculture Management, John Earls, Australia.

THEME V. Artificial Intelligence

Dex: An Expert Systems Shell for Decision Support, M. Bohanec and V. Rajkovic, Yugoslavia.

Courses, Seminars and Conferences

EDITORIAL EXECUTIVE BOARD

Editor in Chief:

- Ricardo A. Rodriguez-Ulloa, Andean Institute of Systems - IAS, Peru

Members:

- Charles Francois, Argentinian Association of Systems and Cybernetics, Argentina.
- Brian Wilson, University of Lancaster, England
- Rafael Rodriguez-Delgado, Spanish Society of General Systems SESGE, Spain.
- Luis Lanata De Las Casas, International Liaisons with Industry, Banking and Services, Taliani Enterprise Group, Peru.

INTERNATIONAL ADVISORY COMMITTEE

Latin America

- Enrique Herrscher, Study Group on Integrated Systems GESI, Argentina
- Cheng C. Lin, Federal University of Minas Gerais, Brazil.
- Gustavo Gonzales, University of the Andes, Colombia.
- Warner Carvajal, University of Costa Rica, Costa Rica.
- José Gonzales, University of the Pacific, Peru.
- David Ritchie, Graduate School of Business (ESAN), Peru.
- Ramses Fuenmayor, University of the Andes, Venezuela.

North America

- Eulogio Romero-Simpson, University of Miami, USA.

Europe

- Ronald H. Anderton, University of Lancaster, England.
- Peter B. Checkland, University of Lancaster, England.
- Raúl Espejo, University of Aston, England.
- Michael C. Jackon, University of Hull, England.
- Laszlo Fekete-Szucs, Szamalk, Hungary.
- Nimal Jayaratna, University of Heriot-Watt, Scotland.
- Alberto Requena, University of Murcia, Spain.
- Fernando Saez-Vacas, Polytechnical University of Madrid, Spain.
- Ingolf Bamberger, Rijksuniversiteit Limburg, The Netherlands.
- Marko Bohanec, Josef Stefan Institute, Yugoslavia.
- Ivo Banic, Institute for Economic Research, Yugoslavia.

Far East

- Hiroshi Deguchi, International University of Japan, Japan.
- Nobuo Ichiraku, University of Musoshi, Japan.

GENERAL COORDINATION

- Sara Bickel, Andean Institute of Systems - IAS, Peru.

Subscriptions (one year, two issues) Individual rate: \$ 20 (outside Latin America S 25) Institutional rate: \$ 30 (outside Latin America S 35)

(Prices in U.S. dollars. Send an air payment order to: Instituto Andino de Sistemas (IAS). - Banco de Credito -Suc. Miraflores, Lima, Peru.)

Subscription address: Instituto Andino de Sistemas (IAS) Consejo Editorial Division de Publicaciones Apartado Postal 18-0680 Lima 18 - Peru

2) A NEW BOOK

SYSTEMS DESIGN OF EDUCATION by Bela H. Banathy



During recent years a host of reports has brought into focus the crisis in education that has placed the "nation at risk". The reports have offered remedies "fixina" education. for Whatever terms are used reform, restructure, renew --the recommendations suggest making adjustments or improvements in the existing system. Despite

massive increases in expenditures and numerous correction efforts, a National Alliance of Business survey has found that 72 percent of executives believe that math skills of new employees have worsened in the last five years, and 65 percent said that reading skills decreased over the same period. *Why*?

Around the middle of this century, our society entered what is often called the "postindustrial/information age," a new stage in the evolution of humanity. It has brought about new thinking and revolutionary changes and transformations in society. Faced with these changes, making adjustments and improving an educational system which is still grounded in the assembly-line thinking of the 19th century will not do any longer. The entire educational enterprise has to be rethought and taken much more seriously. A new design of education has to be created that can guide a broad sweep of a comprehensive transformation: a metamorphosis of education.

In this book, Bela Banathy points out that the current crisis of education is first and foremost a crisis of perception, and its persistence is due to the lack of an approach that is capable of creating a new design. Facing this two-pronged predicament, the author offers new ways of thinking about education and its societal function and the formulation of a new learning agenda. He offers organizing perspectives and an innovative framework that can guide the envisioning of a new image of education. Most significantly, Banathy introduces the intellectual technology of systems design heretofore not practiced by the educational community -that has the power to transform education by design and meet the challenges of the nineties and beyond.

This book serves as a guide to "create the future," to be used by front-line practitioners and educational leaders, as well as the educational R&D and policy-making community. Banathy proposes the notion of "user designers", the involvement in systems design of all those in the community and beyond who have a stake in education and human development. The work sets out an agenda for preservice and inservice professional development and may guide the creation of a new breed of educational technologist: systems designers.

Order Form

1	75	7
1	X	1
Ľ	4	Ч

Educational Technology Publications 720 Palisade Avenue Englewood Cliffs, New Jersey 07632

Please forward a copy of Systems Design of Education: A Journey to Create the Future, by Bela H. Banathy, at \$ 29.95.

Name
Address
City State Zip

Note: All orders under \$ 60.00 are payable in advance. Institutions placing orders for \$ 60.00 or more are to use official institutional purchase order forms or may pay in advance, at their option. Publisher pays all postage and handling on orders paid in advance.

3) ANOTHER VALUABLE BOOK

The International Institute for Advanced Studies in Systems Research and Cybernetics

Proudly announces the publication

ADVANCES IN COMPUTER SCIENCE

Edited by George E. Lasker, University of Windsor, Canada

This new major reference work contains a valuable collection of selected papers written by well-known experts in Computer Science and related fields. The primary focus of this book is on recent advances in several important areas of Theoretical and Applied Artificial Intelligence, Engineering Information Systems, Cognitive Engineering and Knowledge Based/Expert Systems, Natural and Computer Languages, Computer Simulation, Systems Modelling, Intelligent Robotics, Software Engineering, Human Factors and several other fields.

Numerous contributions included in the book show how an imaginative use of various systems research tools and innovative systems approaches can greatly enhance the overall quality of contemporary computer science research in the above areas.

566 pp. (ISBN 0-921836-03-1) May 1989 US \$ 46.00

Can be ordered from: International Institute for Advanced Studies c/o Prof. George E. Lasker University of Windsor, School of Computer Science Windsor, Ontario, Canada N9B 3P4

MEETINGS **EMCSR 1992** ELEVENTH EUROPEAN MEETING **ON CYBERNETICS AND SYSTEMS** RESEARCH, Vienna, April 21-24, 1992

Biennial European meetings on cybernetics and systems research have been held in Austria since 1972. At the last one, in 1990, 250 scientists from 30 countries met to present, listen to and discuss 160 papers. To keep pace with the rapid new developments the Council of the Austrian Society for Cybernetic Studies (ÖSGK) is organizing a similar meeting in 1992.

CHAIRMAN: Robert Trappl, President Austrian Society for Cybernetic Studies

SECRETARIAT: G. Bröckner; G. Helscher

PROGRAMME COMMITTEE:

- K.-P. Adlassnig (Austria) B. Laurel (USA) K. Balkus (USA) F. Leymann (Germany) P. Ballonoff (USA) G. Pask (UK) B. Banathy (USA) F. Pichler (Austria) M.U. Ben-Eli (USA) G. Porenta (Austria) G. Broekstra (Netherlands) H. Prähofer (Austria) E. Buchberger (Austria) J. Retti (Austria) C. Carlsson (Finland) L.M. Ricciardi (Italy) G. Chroust (Austria) J.W. Rozenblit (USA) G. Dorffner (Austria) N. Rozsenich (Austria) W. Gasparski (Poland) N. Sharkey (UK) G. Goldschmidt (Israel) A.M. Tjoa (Austria) W.D. Grossmann (Austria) R. Trappl (Austria) W. Horn (Austria) H. Trost (Austria) R., Hough (USA) S.A. Umpleby (USA) N.C. Hu (China) R. Vallee (France) I. Josefson (Sweden) J. Warfield (USA) G.J. Klir (USA) C. Walters (Canada) Z. Kotek (ČSFR) G. Wunsch (Germany) G. de Zeeuw (Netherlands)
- O. Ladanyi (Austria)

H.-J. Zimmermann (Germany)

ORGANIZING COMMITTEE:

G. Bröckner	J. Matiasek	H. Trost
E. Buchberger	P. Petta	M. Veitl
G. Helscher	F. Pichler	
W. Horn	R. Trappl	

CONFERENCE FEE:

Contributors: AS 1900 if paid before January 31, 1992 AS 2400 if paid later

Participants: AS 2900 if paid before January 31, 1992 AS 3400 if paid later

The Conference Fee includes participation in the Eleventh European Meeting, attendance at official receptions and the volume of the proceedings (available at the Meeting).

As at the previous meetings, eminent speakers of international reputation will present the latest research results in daily plenary sessions. Besides, the following symposia are being organized:

- A General Systems Methodology G. J. Klir, USA
- B Mathematical Systems Theory G. Wunsch, Germany, and F. Pichler, Austria
- C Computer Aided Process Interpretation F. Leymann, Germany, and G. Chroust, Austria
- D Fuzzy Sets, Approximate Reasoning and Knowledge-Based Systems
 C. Carlsson, Finland, and K.-P. Adlaßnig, Austria
- E Designing and SystemsB. Banathy, USA, W. Gasparski, Poland, andG. Goldschmidt, Israel
- F Humanity, Architecture and Conceptualization G. Pask, UK
- G Biocybernetics and Mathematical Biology L.M. Ricciardi, Italy
- H Systems and Ecology C. Walters, Canada, and W.D. Grossmann, Austria
- I Cybernetics in Medicine G. Porenta, Austria
- J Cybernetics of Socio-Economic Systems K. Balkus, USA, and O. Ladanyi, Austria
- K Systems, Management and Organization G. Broekstra, Netherlands, and R. Hough, USA
- L Cybernetics of National Development P. Ballonoff, USA, and S.A. Umpleby, USA
- M Communication and Computers A.M. Tjoa, Austria
- N Connectionism and Cognitive Processing N. Sharkey, UK, and G. Dorffner, Austria
- O Intelligent Autonomous Systems J.W. Rozenblit, USA, and H. Prähofer, Austria
- P Telepresence, Virtual Environments, and Interactive Fantasy
 B. Laurel, USA
- Q Impacts of Artifical Intelligence I. Josefson, Sweden, and E. Buchberger, Austria
- R History of Cybernetics and Systems Research Z. Kotek, ČSFR, and F. Pichler, Austria

Submission of papers:

Draft final papers will be considered for acceptance. These must not exceed 7 single-spaced A4 pages (maximum 50 lines). The final size will be 8.5 x 6 inches. The papers must be in English and they have to contain the final text. They must also include graphs and pictures, but these do not have to be of reproducible quality.

The Draft Final Paper must list the title, author(s) name(s), and affiliation in this order. Please specify the symposium in which you would like to present your paper. Each scientist shall submit only one paper.

Please send **three** copies of the Draft Final Paper to the Conference Secretariat (not to symposia chairpersons!).

DEADLINE FOR SUBMISSION: October 15, 1991

In order to enable careful refereeing, Draft Final Papers received after the deadline cannot be considered.

Final Papers:

Authors will be notified about acceptance no later than November 20, 1991. The publisher of the proceedings will send them the detailed instructions for the preparation of the final paper.

Presentation:

The contributor must present his/her paper personally at the meeting.

HOTEL ACCOMMODATIONS

will be handled by ÖSTERREICHISCHES VERKEHRSBÜRO, Kongreßabteilung, Opernring 5, A-1010 Vienna, phone +43-1-58800-113, fax +43-1-568533, telex 111 222.

SCHOLARSHIPS:

The Austrian Federal Ministry for Science and Research has kindly agreed to provide a limited number of scholarships covering the registration fee for the conference and part of the costs of accommodations for colleagues from eastern and south-eastern European countries. Applications should be sent to the Conference Secretariat before October 15, 1991.

Further Information and Registration:

Organizing Committee of the ELEVENTH EUROPEAN MEETING ON CYBERNETICS AND SYSTEMS RESEARCH 1992

c/o Österreichische Studiengesellschaft für Kybernetik Schottengasse 3 A-1010 Vienna Austria (Europe)

MEETINGS and COURSES

Title	Date	Place	Deadlines	Further Information
FIRST QUANTITATIVE LINGUISTIC CONFERENCE (QUALICO)	23 27. Sept. 1991	Trier, Germany	EXPIRED	Qualico - The Program Committee University of Trier P.O.Box 3825 Trier, Germany
FIRST INTERNATIONAL CONFERENCE ON DOCUMENT ANALYSIS AND RECOGNITION	30. Sept 2. Oct. 1991	Saint-Malo, France	EXPIRED	AFCET 156 Bd Péreire 75017 Paris, France Tel.: +33-1-47-66-24-19
SYSTEMS FOR ISLAND ECOSYSTEMS - AEGEAN SEMINAR 1991	30. Sept 4. Oct. 1991	Samos, Island of Samos, Greece	EXPIRED	Mrs. Anna Kalogrea Research Laboratory of Samos Karlovassi, 83200 Samos, Greece Tel.: (0273)-34750
WORKSHOP ON DESIGNING CORRECT CIRCUITS	6 8. Jan. 1992	Lyngby, Denmark	EXPIRED	Jorgen Staunstrup or Robin Sharp Department of Computer Science Building 344 Technical University of Denmark DK-2800 Lyngby, Denmark Tel.: (+45) 45933332
EDAL - THE EUROPEAN CONFERENCE ON DESIGN AUTOMATION	16 19. March 1992	Brussels, Belgium	EXPIRED	Prof. Hugo De Man c/o CEP Consultants Ltd. 26-28 Albany Street Edinburgh EH 1 3QH, U.K. Tel. + 44315572478
EMCSR 92 - ELEVENTH EUROPEAN MEETING ON CYBERNETICS AND SYSTEMS RESEARCH	21 24. April 1992	Vienna Austria	DRAFT FINAL PAPERS 15. Oct. 1992	Österreichische Studiengesellschaft für Kybernetik Schottengasse 3 A-1010 Vienna, Austria Tel.: +43-1-53532810
COMP EURO 92 INTERNATIONAL CONFERENCE ON COMPUTER SYSTEMS AND SOFTWARE ENGINEERING	4 8. May 1992	The Hague, The Netherlands	SUBMISSION OF MANU- SCRIPTS 1. Nov. 1991	Prof. Patrick Dewilde Delft Univ. of Technology Dept. of EE P.O.B. 5031 2600 GA Delft, Netherlands Fax: 31-15-623271
5 th IFAC / IFIP / IFORS / IEA SYMPOSIUM ON ANALYSIS, DESIGN AND EVALUATION OF MAN - MACHINE SYSTEMS	9 11. June 1992	The Hague/Delft, The Netherlands	EXPIRED	Mr. P.L. Brinkman c/o Man-Machine Systems Group, Laboratory for Measurement and Control, Faculty of Mechanical Engineering and Marine Technology Mekelweg 2 2628 CD Delft, The Netherlands Tel.: 31 15785621
IFAC / IFORS / IIASA CONFERENCE MODELLING AND CONTROL OF NATIONAL ECONOMIES	18 20. August 1992	Beijing, P.R. China	DRAFT PAPERS 15. Dec. 1991	MCNE '92 Secretariat Chinese Association of Automation P.O.Box 2728 Beijing 100080, P.R. China
IFAC / IFORS / IMACS SYMPOSIUM LARGE SCALE SYSTEMS: THEORY AND APPLICATIONS	22 25. Aug. 1992	Beijing, P.R. China	EXPIRED	Prof. Y.P. Zheng IFAC - Symposium LSS '92 Secretariat Chinese Association of Automation P.O.Box 2728 100080 Beijing, China
INTERNATIONAL ASSOCIATION FOR CYBERNETICS 13 th INTERNATIONAL CONGRESS ON CYBERNETICS	24 28. Aug. 1992	Namur, Belgium	ABSTRACT 31. Dec. 1991	International Association for Cybernetics Palais des Expositions Place André Rijckmans B-5000 Namur, Belgium Tel.: 00-32-81-735209

Offenlegung: Der "IFSR Newsletter" erscheint vierteljährlich in englischer Sprache unter der Redaktion von Dr. Stephen Sokoloff. Die Zeitschrift dient der Information über die Aktivitäten der IFSR. Sie wird kostenlos an Mitglieder ihrer insgesamt 17 Mitgliederorganisationen in 14 Ländern versandt. Die Kosten werden von der IFSR aus den Beiträgen der derzeit 17 Mitgliederorganisationen getragen. Präsident der IFSR ist für 1990/92 Prof. Gerrit Broekstra (Niederlande). Vize-Präsident Prof. Dr. Franz Pichler (Österreich). Sekretär-Schatzmeister Dr. Bela Banathy (U.S.A.). Alle Funktionen werden ehrenamtlich ausgeübt. Druck: Druckerei Bad Leonfelden, 4190 Bad Leonfelden (To our readers: To comply with the Austrian "Media Act" every Publication must at least once a year contain a declaration concerning ownership and purpose.)