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Professor MAGOROH MARUYAMA

rejection, one-tenth of a percent, by the President's passionate recognition of each employee's dedication and inventiveness, while Lucky Ohji Store (LOS), a medium-size fresh food supermarket in a suburb of Osaka, Japan, withstood the increasing competition from giant supermarket chains by maximizing creative interactions among its employees.

We have chosen these two firms for comparison not because they are representative of the business enterprises in their cultures, but because they are exceptional and non-average. We wanted to study cultural differences in the way firms become exceptionally successful. NATD is not "typically" American. LOS is quite different from other Japanese firms. Yet in both cases. ome of the basic cultural characteristics available are maximally — and exceptionally well — activated. This has a profound implication for management. To be exceptionally successful, a firm must mobilize the cultural characteristics of the country in which it is located, rather than copying the methods developed in other cultures. But both firms also deviate from ordinary or average ones and show non-typical characteristics. This is the second point which I would like to discuss in this article.

#### NATD — Individual Praise and Trust

NATD has approximately 90 employees, each of whom receives the utmost of attention from the President Thomas Melohn. He praises each positive action by the employee, and gives out a "Superperson of the Month" award in monthly ceremonies. He also cultivates mutual trust among the employees in various ways. For example, on bayday he may purposely distribute the paychecks to the prong persons, asking them to give them to the right ones. The employees show much affection for the President and are dedicated to their work. On several occasions they

# SUCCESSFUL BUSINESS MANAGEMENT IN DIFFERENT CULTURES: TWO WAYS TO ATTAIN HIGH QUALITY

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Success is arrived at in different ways in various cultures. Two firms in two different countries have both attained a high quality of products by means of exceptional human relations management. But what makes good human relations was not the same in both cultures. North American Tool and Die Inc. (NATD) in California, a supplier of precision frames to electronics notables such as Apple Computer, Hewlett Packard, Tektronix and Texas Instruments, attained an amazingly low rate of

voluntarily showed up during the weekends to fill urgent orders. Once an employee disappeared in the morning after working for one hour and a half. Later the President learned that he had gone to his mother's funeral, but he had filled an urgent order before doing so.

The very low rate of rejection is achieved not by inspection, but by the conscientious work of each employee. In the factory, there is no inspection station. There is no assembly line. Each person operates one machine, separately placed. The parts to be processed are either brought to and picked up in boxes from each worker's station, or the worker himself/herself brings the boxes from and to the other stations. Everybody works at his/her own pace.

During the work, everybody stays alone at his/her machine. The layout of the factory floor is such that even during the lunch break there is no place where more than 5 or 6 people can sit together. The workers form small groups of 2 or 3 each to eat their lunch in separate corners of the factory or in their cars. Yet a feeling of mutual trust has been achieved.

One reason for this success is undoubtedly the infectious personality of the President. Another key is the careful screening of the applicants by the President himself. For each vacancy, he begins with about 300 applicants. About 20 are chosen for an interview with him. He let me be present at one of the interviews. He particularly looked for clues to initiative-taking, inventiveness, sports, club activities and interpersonal attitudes.

There are several recent immigrants among the employees, particularly from Southeast Asia. I talked with some of them and asked them whether they find the individualized praise, recognition and award-winning embarrassing. It turned out that they had joined the firm only a few weeks before, and had not yet had a chance to receive an award in front of the others. But as the

number of employees increases, there will be more immigrants in the firm who may feel differently about the management method.

NATD is very American, and the idea of individual recognition and praise is compatible with the American culture. Yet NATD has characteristics that are different from those of average American firms. An example is the employee's willingness to work at odd hours and on weekends, even upon very short notice. Another is the purposeful distribution of paychecks to the wrong persons. Above all, the personal style of the President Thomas Melohn is rather un-American: He shows affection and emotion very readily instead of being professional and impersonal. He weeps and chokes with tears when he talks about the accomplishments of his employees ... a manner which is seldom seen nowadays.

#### LOS — Group Interaction and Creativity

LOS is a medium-size supermarket of fresh vegetables, fruits, fish and meat in front of a railway station in a suburb of Osaka. Recently several large supermarket chains opened their stores within the same block. Pricewise LOS cannot compete with them. However, LOS is maintaining its sales level: customers like its unique style. This cannot be explained by the Japanese consumers' propensity to stay with the same store, because the suburb has become a bedroom town with a high turn-over rate of the population as well as an influx of young people. LOS is a branch in a chain of some 19 stores, most of which are located in the City of Osaka. Other branches have not been able to copy its success.

Five years ago LOS was given a new manager, who had ideas of his own on how to make improvements. Employees who had been dissatisfied became enthusiastic, new activities were generated among the workers, and both efficiency and quality improved.

The core of these activities is a group of semi-permanent parttime workers who are housewives. Other employees also participate. They interact in several ways: weekly reporting and brainstorming sessions which include the manager and smaller, informal meetings as needs arise. They actively collect and write down customers' comments, and report and discuss them in the weekly meetings. They also invent new "dishes" daily, which are sold in the ready-to-eat take-home food section, a special attraction of the store. Finally, they issue a monthly magazine, xeroxed and stapled, summarizing the customers' comments, sales statistics, error statistics, new ideas, and employees' criticisms and praises of each other. The magazine is filled with cartoon illustrations which the employees draw themselves.

The main reason for having these activities is: interaction, creativity and fun. The philosophy of the manager is that work must be fun. Our research team members were present at one of the weekly meetings, and they found it jovial, substantial and enjoyable. But these activities also require hard and painstaking work. Each employee's cash register errors are tabulated. The employees take turns observing and making positive and negative comments on one another's behavior toward customers. The customers' comments are tabulated in various categories. The

employees invent new dishes and food combinations, for which they have to conduct a great deal of interactive research and experimentation, bringing together individually different experiences and knowledge.

Unusual topics come up in meetings from time to time. For example, an elderly customer asked an employee about a product, and this inquiry turned into a short conversation: the customer had recently moved into this area, did not have his family with him, etc. The employee not only provided him with suggestions and advice, but also took time to listen to him, since he had no one else to talk to. The customer was very grateful. Japan, as well as many other countries, is in social transition: there are increasing numbers of senior citizens, employees often have to live away from their families due to work requirements, etc. LOS employees therefore have improvised new social functions in addition to their commercial ones.

### The Essence of Japanese Management and Work Style

The basic principle of traditional Japanese garden design and floral art is the symbiotization of diverse elements in such a way as to enhance the individuality of each element through its interactions (Maruyama 1980, 1981). Repetition of the same element is avoided. In contrast, flowers in the Dutch tulip gardens are used as color carpets in which the individuality of each flower disappears. Similiarly, a good Japanese manager is one who puts heterogeneous individuals together, assigns a task to the group rather than to each person and lets the group members figure out their own pattern of interactions based on their individual differences (Maruyama 1984, 1985a). Foreign managers who try to assign individual tasks to Japanese employees obtain poor results.

Mathematician Stanislaw Ulam has shown (Ulam 1960) that entirely new information - and not just a new combination of old elements — arises through interactions among heterogeneous elements (Maruvama 1960, 1963). Genuine creativity can be attained either by interactions between the ideas in one person's mind or by interactions among many persons. Many of the inventions in Japan ar devised by groups. Statistics (Gregory 1986) in electronics show that already by 1962 Japanese patent applications had exceeded those in West Germany, and by 1968 there were more patent applications in Japan than in the USA. By 1976 Japanese applications were 60% higher than USapplications and 46% higher than those of West Germany. In the same year, Japanese nationals were the largest single group of foreign national holders of US-patents, and held more than twice as many US-patents as UK applicants. In 1972 Japan emerged as a net exporter of technology when the export/import ratio of patent licensing in terms of royalty receipts/payments was 125.9%, counting new contracts only. In 1977 this ratio reached 214.9%. Invention by groups is therefore seen to produce good results.

There are numerous well-documented case studies of Japanese inventions by groups (Uchihashi 1982, Maruyama 1985b). An example was the first wristwatch using a quartz electronic resonant circuit. It was designed by Seiko and defeated Swiss watches in time-keeping

accuracy in a Swiss competition held in 1967. The sponsors of this traditional Neuchâtel competition, in which Swiss watches had previously been the winners, panicked and did not publish the result, and they discontinued the competition in subsequent years. Prior to miniaturization, the first quartz clock, which had still used vacuum tubes instead of transistors, was so big that it had to be transported on a pick-up truck. Seiko achieved miniaturization by several methods. One involves cutting quartz into a zigzag, thereby compressing into a small space the length needed for the desired resonant frequency. By letting quartz experts who did not know how to cut quartz work together with jewelry makers, Seiko was able to put quartz into wrist watches. Another example is a solution to derailing problems of high-speed trains which was devised in the 1950s. The use of aircraft technology enabled engineers to eliminate spontaneous resonant vibrations. This facilitated the creation of the bullet train in the 1960s. Traditional train engineers had believed that derailments were caused by crookedness of the rails. But aircraft engineers who had been recruited into the National Railways thought that trains might develop resonant vibrations regardless of how straight the rails were. It was recided to conduct experiments with models. To obtain results relevant for railway engineering, the models had to be on model tracks, but at the same time the aircraft engineers employed the wind tunnel concept, in which the models stay still. The rails were mounted on a very large, rotating wheel. With this system it was easy to measure and control the swaying of the rails. The experiments proved that the trains vibrated at some specific speeds.

In LOS, similar inventive interactions are at work, especially in the preparation of ready-to-eat take-home dishes. In this task, employees from different geographic areas and with different backgrounds interact. The store manager's policy of letting them interact and leaving room for improvisation and inventiveness is very typically Japanese.

However, when other branches of the same supermarket chain tried to duplicate the success of LOS, it did not work well. The format of the weekly meetings and the contents of the monthly magazine were easy to copy, but the expected results were not forthcoming.

What distinguishes LOS from other stores is that the employees have worked out a spontaneous and enjoyable pattern of interaction — and that they are having fun. They are not simply fulfilling requirements. Before the arrival of the present manager, they were unhappy: there were factional fights among them and one clique was unfriendly to the others. Now you get the impression that the employees are glad to have been freed of the bickering, which was not of their own making.

In interpreting this change, it would be incorrect to say that the present manager **made** the employees become more friendly to one another. It would be more correct to say that he **removed** the causes of their unfriendliness (the details are confidential), and let the employees' abilities flourish. There is also no doubt that his jovial and humorous nature is contagious. In the case of President Melohn of NATD, his passionate nature is infectious. However, more important is his careful screening of job applicants. He selects only lose who are compatible with, responsive to and

appreciative of his way of managing. The fact that he rejects 299 out of 300 applicants means that his employees consist of rather atypical and non-average Americans. Yet he maximally and optimally uses a very American characteristic: the praising and rewarding of individuals in front of others. He also uses some non-American methods, such as the distribution of paychecks to persons other than the proper recipients. We also noted that President Melohn is not "typically" American; his approach is passionate in an era of impersonal professionalism. However, there were periods in American history when passion was more accepted and valued. In his view, he is reviving an old virtue.

Japan has regional differences in personal characteristics. People in Tokyo are more serious and quiet than those in Osaka, who are more informal and outgoing. But even by Osaka standards, the LOS manager is exceptionally humurous and friendly.

From these two cases in two cultures we learn that a firm, in order to attain an exceptional success, must activate some of the basic characteristics of the local culture, and that an unusual approach must be employed, which is not in contradiction with cultural constraints.

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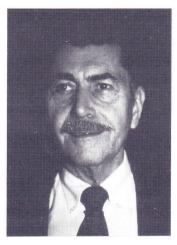
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A sample page from the monthly magazine of LOS.





Professor ROBERT VALLÉE

Foto: Sokoloff

# OUR FRENCH MEMBER ORGANIZATION: COLLÈGE DE SYSTÉMIQUE DE L'ASSOCIATION FRANCAISE POUR LA CYBERNETIQUE ET ECONOMIQUE TECHNIQUE (AFCET)

156, bld. Péreire, F-75017 Paris

Report by: Robert Vallée

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#### **General Information**

The Collège de Systémique de l'AFCET (France) is one of the six divisions of the **Association Francaise pour la Cybernétique Economique et Technique** (the five other divisions are devoted respectively to: Automatics, Bureautics, Management, Computer Science and Applied Mathematics). There are 450 **members** of the Collège de Systémique. The total membership of AFCET is about 5000.

#### Working Groups of the Collège de Systémique

Hierarchical Systems (P. Auger, P. Winiwarter, together with ISSR-France)

Information and Systems (B. Bouchon-Meunier)
New Mathematical Methods for Systems (Th. Moulin)
Systemics and Epistemology (J.-L. le Moigne)
Synergy and Coherence in Systems (Z. Wolkowski)
Value, Quality and Systems (M. Mili)

These groups generally organize lectures, which are followed by discussions or short symposia.

#### **Other Activities**

- Seminar about theoretical and applied systematics (E. Bernard-Weil, B. Paulré, R. Vallée). This consists of lectures about systems - generally two are held eacmonth.
- Publication of our official quarterly journal, "Revue Internationale de Systémique" (Publisher: Dunod, Paris).
   R. Vallée was the Editor from 1987, when the journal was founded, until 1988 (Associate Editor: A. Rénier).
   The new Editor is B. Paulré (Associate Editor: E. Andreewsky).
  - This journal is devoted to all aspects of systems, both theoretical and applied (sciences of the artificial, biology, cognitive sciences, organization, economy, epistemology, etc.). In each issue there is generally a section devoted to archives: reprints of old papers.
- A new series of books, "AFCET—Systèmes", has recently been launched (Editor: B. Paulré, Publisher: Dunod, Paris).
- A Conference, The "Congrès Européen de Systémique" was held in Lausanne, Switzerland, October 3-6, 1989. The official languages were Frenc' and English.



Professor GERARD de ZEEUW

Foto: Sokoloff

## Systeemgroep Nederland (Dutch Systems Group)

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#### **General Information and Policies**

The Systeemgroep Nederland aims to contribute to scientific enquiry by studying the concepts and methods of various disciplines in their appearances, formulations and applications. At present an important focus is the study of concepts and methods in those disciplines whose objects seem 'to talk back'.

The Systeemgroep Nederland was founded at a time when systems thinking was not well-known (1970). This situation has changed, due to both our efforts and those of the International Federation for Systems Research (we are one of its founding members). In all the Dutch universities, systems theory is now widely taught, and lectures on it are held at almost all professional schools. This has led to the emergence of many well-read and experienced systems thinkers (seen in relation to the size of our country we have the largest membership of any IFSR group). Over the years, the Systeemgroep Nederland has adapted to this changing situation.

Some of the changes relate to our policy on publication. At first our emphasis was on distributing systems knowledge. This led to the publication of a Yearbook and a Newsletter, and to the organization of many public courses. Later we became more interested in enhancing the expertise needed for the application of systems ideas. To implement this policy, a journal, "Systemica", was started, which publishing concentrated on interesting formulations and on stimulating discussions on how to make improvements. Currently, our focus has again shifted: the group now aims at keeping members abreast of new developments and creative formulations. Applications to the various disciplines fortunately seem to have found their way into journals devoted to those fields.

Presently, members subscribe to "Systems Research", to the "IFSR Newsletter", to "SWIM" (a Dutch language periodical published together with the Dutch Society for Artificial Intelligence), and to "Systemica", which now appears infrequently, but contains papers of meetings that are deemed of interest to the members.

#### **Current Activities**

The Systeemgroep Nederland supports working groups and local and international meetings. Yearly courses are prepared on topics of special interest. All efforts are concentrated upon supporting research; no attempts have been made toward creating an organized body of professional systems practitioners.

In the past, a series of 'Problems of ...' meetings was staged (Problems of Context, Problems of Levels and Boundaries, Problems of Actors and Actions, Problems on (dis)appearing knowledge, Problems of (im)possible worlds). These conferences brought together researchers from various countries and disciplines to discuss new developments and new ideas.

From March 27 to April 1, 1989, an international meeting was held in Amsterdam on the theme: "SUPPORT, SOCIETY AND CULTURE: MUTUAL USES OF CYBERNETICS AND SCIENCE". It was sponsored by the American Society for Cybernetics, the Cybernetic Society and the International Federation for Systems Research (information can be obtained from Ms. Jopp Muller, Grote Bickerstraat 72, 1013 KS Amsterdam, Netherlands).

#### Plans for Activities in the Next Five Years:

It is intended to keep on organizing national meetings on special topics and themes that have a good chance of leading to creative advances in systems theory and systems practice. The Systeemgroep Nederland will continue to further international systems research, and to support the development of the International Federation for Systems Research (whose current president has been chosen from the Dutch delegation).

The Board of the Systeemgroep Nederland has, with the support of the membership, been able to alter its course in response to the changing situation, and is convinced that it can keep on doing so.

In the next five years we will continue to have international meetings on special topics (e.g. in the series on 'Problems of ...')!

# THE GERMAN SOCIETY FOR BUSINESS AND SOCIAL CYBERNETICS (GWS)

Am Plan 2, D-3550 Marburg 1, FRG

#### **Board**

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#### **HISTORY, OBJECTIVES AND ACTIVITIES**

of the German Society for Business and Social Cybernetics (GWS).

The GWS is a scientific society with more than 120 members. In 1968 it was founded with the participation of the then president of the Thyssen Joint Stock Company, Dr. Ernst-Wolf Mommsen, under the protectorate of the Board for Rationalization of the German Economy (RKW).

The intention was to arouse, with the framework of the GWS, an exchange of ideas among the top managers and scientists who are interested in business cybernetic issues. With the help of Dr. Mommsen, a series of highly interesting business cybernetic roundtable conferences was organized.

After the death of Ernst-Wolf Mommsen, there was a shift of emphasis in favour of the universities and colleges, from which one third of our members come. However, practical problems relating to the utilization of cybernetic knowledge remained our primary concern: a considerable number of the specialist lectures were given by practicians.

Some of our conferences: "System Theory and Cybernetics in Business and Administration" (1981 in Reutlingen, published by Duncker & Humblot), "Socioeconomic Applications of Cybernetics and System Theory" (1982 in Berlin, published by Erich Schmidt), "Applied Economic and Social Cybernetics — New Approaches in Practice and Science" (1983 Marburg, published by Erich Schmidt), "System Research and Cybernetics in Business and Society" (1985 in Osnabrück, published by Duncker & Humblot), "Business System Research and Economic Cybernetics" (1986 in Stuttgart, published by Duncker & Humblot), "Cybernetic Aspects of Modern Communication Technology" (1987 in Heidelberg, published by Duncker & Humblot).

We still, however, devote a great deal of effort to round-table discussions. We organized such discussions: in 1980 in the headquarters of the Industrial Credit Bank Düsseldorf, in 1982 with the Transformer Union Stock Company in Nuremberg, in 1983 in the headquarters of the Daimler-Benz Stock Company in Sindelfingen, in 1985 in the headquarters of Fried. Krupp Limited in Essen and 1986 in the headquarters of the BMW Stock Company in Munich.

In 1988, a round-table conference was held at the Schenker Company in Frankfurt, and two symposia of the members of the GWS took place in Eschborn and Regensburg. In November 1989, a large conference will be held in Trier on "Entrepreneurial Strategies in the Socio-economic Change".

#### THE GREEK SYSTEMS SOCIETY

82 Fokionos Negri Street, Athens 11361, Greece.

Tel. (001) 8215946

#### **Leading Officer**

Dr. Michael Dekleris ...... Managing Director

#### **General Information**

Founded in 1983 by noted scholars of Systems Theory, the Greek Systems Society (G. S. S.) actively promotes research and education in systems.

Being of an interdisciplinary composition, the Society has members engaged in systems research and teaching in such different fields as artificial intelligence, electrical engineering, information theory, cybernetics, psychiatry, psychology, law and politics, sociology, economics, management, public administration, biomedical engineering, etc.

#### **Activities**

In accordance with the goals set in the G. S. S. statute:

- Activities are carried out by the main component organizations, the Group of Senior Members, the "Laboratory Law, Science and Policy" (headed by Dr. M. Dekleris) and the "Laboratory for the Investigation of Human Relations" (headed by Dr. Katakis).
- 2. The G. S. S. has published significant books in the field of Systems Science: "Systems Theory" (1986) is a collective work written by the founders of the society, which provides examples of applied systems research in various fields. "Systems Management" (ca. 1989) is another collective work, written by the members of the "Laboratory Law, Science and Policy", which focuses on problems of systems design and public policy.
- 3. The G. S. S. has been successful in introducing systems education into the curricula of Greek institutes of higher education. Thus, systems methodology is presently being taught, within the context of various disciplines, at the National School of Public Administration, the Institute of Public Administration, the Athens Polytechnic School, the University of Patras, the University of Salonica, etc.

- 4. The G. S. S. has been disseminating systems theory to the wider public by holding round table discussions, conferences, etc.
- Internationally, the Society has pursued a policy of cooperation. It has become an affiliate member of the IFSR and a number of its members have formed a national chapter of the ISSR.

In 1984 the Society organized the "Marathon Talks" in the regional Fuschl conversations, with the participation of foreign systems scholars. Recently, the Greek Systems Society took the initiative and, together with the French Collège Systémique, the Italian Systems Society and the Spanish Systems Society, founded the European Systems Society. The latter held its first international congress in Lausanne (Switzerland) from 3 to 6 October, 1989.

### NEW BOOKS AND PUBLICATIONS

Two new books in the **IFSR Series** (Pergamon Press). (We would like to urge our readers to purchase these valuable works.)

# Metasystems Methodology A New Synthesis and Unification

#### A D Hall III

Advanced Decision Handling, Inc., Port Deposit, Maryland, USA

The definitive book on systems methodology, a newly synthesized individual or group process for the practical solution of complex problems in any field. The method is a natural evolution of earlier methods used in systems engineering, pure science, law, politics and other systems-orientated fields, and is more powerful, comprehensive and unified than its predecessors. In this new approach to the subject, the author undertakes a morphological analysis of systems methodology and decision making. Following an introduction to the overall philosophy and concept, and an exposition of the time dimension of the four-dimensional morphology, individual chapters discuss the logic and human dimension of systems methodology, including problem definition, system design, economic decision making, psychological and social decision making, and major techniques of physical system synthesis and analysis. The carefully selected references are a guide to the literature of systems methodology. Includes problem sets.

#### CONTENTS

Part I. Philosophical foundations.

An Overview of Systems Methodology
Basic Percepts, Concepts and Precepts.

Part II. The time dimension.

Activity analysis of systems methodology.

Part III. The logic and the human dimensions.

The basis of systems methodology in scientific method. Problem finding and problem definition (diagnosis). Building the normative scenario (designing and using the value system).

Economic decision making.

The basis of systems methodology in causistry. Psychological and sociological decision making. Systems synthesis, systems analysis and optimization. Hardcover, 526pp. US-S 63.00 price slightly different in some countries), June 1989.

# Foundations of Mathematical System Dynamics

# The Fundamental Theory of Causal Recursion and its Application to Social Science and Economics

#### A Aulin

Institute of Mathematics & Statistics, University of Tampere, Finland

This book is a foundational study of causality as conceived in the mathematical sciences. It is shown that modern mathematical dynamics involves a formulation of the fundamental concept of causality and an exhaustive classification of causal systems. Among them are the 'self-steering' and 'self-regulating' systems, which together form the class of purposive systems, on whose specific properties the book then focuses. These properties are the mathematical-dynamical foundations of the behavioural and social sciences. This is the definitive book on causality and purposive processes by the originator of the mathematical concept of self-steering.

For systems researchers, behavioural and social scientists, economists, and postgraduates in these fields.

#### CONTENTS

Fundamental dynamics. The general theory of causal recursion. Simple applications: causal recursion in population dynamics and economic growth theory (measurable systems).

Complex applications: the self-steering and self-regulation of human societies as wholes (non-measurable systems). Historical illustrations of self-steering in different types of human societies.

The problem of origin: the self-steering and steered-fromoutside layers of consciousness.

Hardcover, 400pp. (approx). price approx US-\$ 100.00, June 1989

#### **Further Information on both books:**

PERGAMON OFFICES

USA, Central & South America:

Pergamon Press, Inc., Maxwell House, Fairview Park, Elmsford, New York 10523, USA

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Pergamon Press GmbH, Hammerweg 6, D-6242 Kronberg/Taunus, FRG

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Pergamon Press Plc, Headington Hill Hall, Oxford OX3 () BW, UK

An important Journal-vital for all systems scientists:

#### SYSTEMS RESEARCH

### The Official Journal of the International Federation for Systems Research

Editor-in-Chief: **JOHN N WARFIELD,** Institute for Advanced Study in the Integrative Sciences, George Mason University, Thompson Hall, 4400 University Drive, Fairfax, VA 22030, USA

The International Federation for Systems Research stimulates inquiry and research into systems and their interactions through its journal **Systems Research**, a multidisciplinary focus for the exchange of new ideas and knowledge relating to the development, assessment and management of systems programs and activities. The journal concentrates on the problems of change in societies or organizations, for example the implementation of rules and regulations to increase the quality of life and work and the introduction of new, emancipatory scientific ideas in daily life.

Readers include academics and professionals intent on overcoming discrepancies in human constructions and organizations.

A Selection of Papers that have appeared in "Systems Research":

**A F ARMSTRONG** & **P DUDGEON** Australia), A systematic approach to occupational stress.

A N CHRISTAKIS, L K KRAUSE (USA) & Y PRABHU (India), Synthesis in a new age: A role for system scientists in the age of design.

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**G J KLIR** (USA), Systems profile: The emergence of systems science.

**B H BANATHY** (USA), Matching design methods to system type.

**A J FEDANZO Jr** (USA), Applied organizational genetics. **W KINSTON** (UK), A total framework for inquiry.

**J BEDNARZ Jr** (USA), Autopoiesis, the organizational closure of social systems.

A sample copy and subscription information can be obtained from PERGAMON PRESS (address: see above).

#### **FACULTY POSITION OPENING**

Beginning on September 1, 1990, Saybrook Institute has a full-time, senior-level opening in teaching and research in systems inquiry. Saybrook is an alternative, fullyaccredited graduate school and research center offering Ph.D. s in psychology and human science. Our mission is to take seriously the criticisms which have been leveled against mainstream social science. We invite and encourage innovative epistemological and methodological inquiry which challenges mainstream thinking and research and which produces results relevant to improving the human condition. Candidates must have experience in teaching on the graduate level and an outstanding record of scholarship and research relevant to the stated mission. The programs are interdisciplinary and we welcome candidates from the systems sciences, social sciences and management science, as well as other disciplines. Candidates having experience in curriculum development and teaching the systems approach emphasizing human activity systems are encouraged to apply. Saybrook is an independent, free-standing school with both an external degree and a residential teaching format. Send letter of interest, curriculum vitae or rèsumè and samples of research and scholarly papers to:

> Chair, Faculty Review and Development Committee Saybrook Institute 1550 Sutter Street San Francisco, CA 94109 USA

Application deadline: March 31, 1990.

#### **NEW ORGANISATIONS**

#### **CALL FOR MEMBERS:**

# THE INTERNATIONAL SOCIETY FOR INTERCOMMUNICATION OF NEW IDEAS, INC. (I.S.I.N.I.)

#### **HONORARY MEMBERS:**

Henri Guitton	Membre de l' Institut de France
Friedrich A. Hayek	Nobel laureate, Freiburg i. Br., W.
	Germany
Jan Tinbergen Nob	el laureate. The Hague, Netherlands

#### **OFFICERS:**

Anghel N. Rugina, USA	President
	First Vice President
Edgar Ortiz, Mexico	Second Vice President
harles J. Collazzo, USA	Secretary-Treasurer
Maria Adriana de Villegas, Ger	neva, Switzerland Public Relations

If we look around us, there is a plethora of unsolved economic, financial and social problems at the local, regional, national and international level.

This is the best proof that traditional views and procedures (analyses, policies, practices) are no longer suitable or sufficient for the effective and efficient solution of the many problems we now are confronted with. We urgently need new ideas and new interpretations.

In order to create a better intellectual climate conducive to the discovery of new ideas and interpretations and to their further support and open and fair discussion, we came to the conclusion that the time was ripe for the birth of ISINI.

#### CALL FOR MEMBERSHIP AND PAPERS

The newly established "International Society for Intercommunication of New Ideas, Inc." (ISINI) is accepting new members at a fee of US-\$15.00.

It offers the opportunity of presenting a paper at its First Congress in Paris, France, on August 27 - 29, 1990, which is devoted to the following themes:

- The Relationship Between History (facts, practice) and Theory (concepts, analysis).
- New Roads for a Better World of Tomorrow: Restructuring Capitalism versus Restructuring Socialism.
- III. Socio-Economics for Developed and Developing Countries in Search of Stability, Full Employment and Social Justice.
- IV. Methodology of Economics and Other Sciences.
- V. Economics and the Arts, Letters and Humanities.
- VI. Commemoration of Leon Walras (1834 1910) and François Quesnay (1694 1774).

Inquiries should be sent to:

Professor Anghel N. Rugina, President ISINI 145 Moss Hill Road; Jamaica Plain, Mass. 02130 USA Tel. (617) 524-4580

#### LIST OF MEMBERS OF IFSR — UPDATED DECEMBER 1989

#### I. NORTH AMERICA

American Society for Cybernetics Dr. Steve Ruth Vice-President Department of Decision Sciences George Mason University Fairfax, VA 22030 USA Tel: (703) 323-27 38

International Society for the Systems Sciences
Dr. Elliott Mittler, Secretary
University of Southern California
Institute of Safety and Systems
Management, Room 108
's Angeles, Ca. 90098-0021, USA
Intet:
MOUNTS @ USCM USA

#### **II. LATIN AMERICA**

Mexico D.F.

Asociacion Mexicana de Sistemas y Cibernetica, a. c. Dr. J.L. Elohim President Antonio Sola 45 Col. Condesa C.P. 06140

Instituto Mexicano de Sistemas Javier Marquez d. Reforma 199 Piso 14 Col. Cuauhtemoc Mexico 06500 D.F. Fax: 664-22-14

sociation Argentina de Teoria General de Sistemas y Cibernetica Dr. Charles Francois, President Libertad 742 1640 Martinez Republica Argentina

#### III. ASIA

The Society of Management Science and Applied Cybernetics (SMSAC) Secretary: Prof. Dr. A. Ghosal O. R. Unit, C. S. I. R. Complex, N. P. L. Campus New Delhi 110012, India

#### IV. NORTHERN EUROPE (UK + Benelux)

United Kingdom Systems Society MS. L.J. Davies, Chairman 99 Godwin Road Stratton St. Margaret Swindon Wiltshire SN 34xF (England)

The Cybernetics Society (U. K.) Dr. Brian Warburton Vice-Chairman c/o School of Pharmacology Brunswick Square London WC 1 England

Systeemgroep Nederland Secretariat: Dr. K.A. Sondyn Katholieke Hogeschool Tilburg Hogeschoollaann 225 Tilburg The Netherlands

SOGESCI — B.V.W.B. Prof. Chr. de Bruyn General Manager Rue de la Concorde 51 B 1050 Bruxelles Belgique

#### V. CENTRAL EUROPE

College de Systemique de l' AFCET Prof. Robert Vallée Honorary President 156, boulevard Pereire F-75017 Paris France Gesellschaft für Wirtschafts- und Sozialkybernetik (GWS) Prof. Dr. B. Schiemenz, Direktor General Am Plan 2 D 3550 Marburg 1, FRG

Österreichische Studiengesellschaft für Kybernetik (ÖSGK) Prof. Dr. Robert Trappl, President Schottengasse 3 A 1010 Wien Austria Phone: +43-1-53532810

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#### VI. SOUTHERN EUROPE

Sociedad Espanola de Sistemas Generales Dr. Rafael Rodriguez Delgado, Vice-President Dr. Gomez Ulla, 4 28028 Madrid Spain

Greek Systems Society Dr. Michael Decleris Managing Director 82 Fokionis Negri Street Athens 11361 Greece

#### VII. EASTERN EUROPE

Polskie Towarzystwo Cybernetyczne (Polish Cybernetical Society) Professor Dr. Wojciech Gasparski Design Methodology Unit Dept. of Praxiology Polish Academy of Sciences Nowy Swiat Str. 72 00-330 Warsaw Poland

John v. Neumann Society For Computing Sciences Dr. Balint Domolki Bathori U. 16 (p.f. 240) H 136 Budapest 5 Hungary (Phone: + 329 349, + 329 390) (Telex: + 22-5369)

#### **MEETINGS and COURSES**

Title	Date	Place	Deadlines	Further Information
Lyon Conference and AFCET: Neural Networks: Biological Computers or Electronic Brains	<b>Date 1990</b> 6 8. March 1990	Lyon France	Program already organized	AFCET, Conference Department 156, Boulevard Péreire F-75017 Paris, France Tel. (331) 47662419 Fax (331) 42679312
EMCSR 1990 10th European Meeting on Cybernetics and Systems Research	17 20. April 1990	Vienna Austria		Prof. Robert Trappl Department of Med. Cybernetics University of Vienna Freyung 6/2 A-1010 Vienna, Austria Tel. +43-1-53532810 Fax +43-1-630652
5 <sup>th</sup> "CORE" CONVERSATION Fuschl Lake Austria	23 27. April 1990	Fuschl Lake Austria	4	Prof. Bela H. Banathy 25781 Morse Drive Carmel, CA. 93923 USA Tel: (408) 625-3178
IFIP TC-11 Sixth International Conference and Exhibition on Information Security	23 25. May 1990	ESPOO (Helsinki) Finland	two copies of paper 31. March 1989	IFIP/SEC '90/CONGREX (Finland) Linnankatu 3 SF-00160 Helsinki, Finland Tel. +358-0-175355
8th International Congress of Cybernetics	11 15. June 1990	New York City, USA	Abridged Paper Nov. 89	Prof. Constantin V. Negotia Congress Chairman Department of Computer Science Hunter College, City University of New York 695 Park Ave New York, NY. 10021, USA
CECOIA II 2e Conferénce Internationale sur l'Economique et l'Intelligence Artificielle	2 6. July 1990	Paris France		Prof. Robert Vallée 156, bld. Péreire F-75017 Paris France
3rd International Conférence - IPMU Information Processing and Management of Uncertainty in Knowl- edge-based Systems	2 6. July 1990	Paris France	Abstracts 1. December 1989 Papers 1. June 1990	Bernadette Bouchon-Meunier Secrétariat de la Conférence IPMU ENSTA, 32 Boulevard Victor F-75015 Paris
DIAC 90 Directions and Implications of Advanced Computing	28. July 1990	Boston Mass. USA	Papers (4 Copies) 1. March 1990	Douglas Schuler Boeing Computer Services MS 7L-64, P.O. 24346 Seattle, WA 98124-0346, USA Tel. (206) 865-3226
ISINI International Society for Intercommunication of New Ideas	27 29. August 1990	Paris France		Prof. Anghel N. Rugina President ISINI 145 Moss Hill Road Jamaica Plain, Mass. 02130 Tel. (617) 524-4580
Operations Research 1990	28 31. August 1990	Vienna Austria	Abstracts 15. April 1990	Prof. G. Feichtinger Institut für Ökonometrie Technische Universität Wien Argentinierstraße 8 A-1040 Wien, Austria
International Conference on Signal Processing '90	22 26. October 1990	Beijing (Peking) China	Abstracts 20. November 1989	Professor Yuan Baozong Research Institute of Information Science Northern Jaotong University Beijing 100044, China
MIE-European Federation for Medical Informatics Medical informatics 10th International Congress	<b>Date 1991</b> 19 22. August 1991	Vienna Austria		MIE 91 Interconvention A-1450 Vienna, Austria Tel. + 43-1-23 69 26 41

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 1988/90 Prof. Gerrit Broekstra (Niederlande). Vize-Präsident Prof. Dr. Franz Pichler (Österreich). Sekretär-Schatzmeister Dr. Bela Banathy (U.S.A., Alle Funktionen werden ehrenamtlich ausgeübt.

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