

# Newsletter

VOLUME 19, No. 1 (JULY 2000) Co-Editor: C. Hofer

#### The new IFSR Executive Committee





Vice President

Michael C. Jackson



Secretary/Treasurer
Gerhard Chroust



#### Dear Readers!

I hope that the layout of the new Newsletter will be a pleasant surprise for you. We made some far reaching changes to the Newsletter in order to serve IFSR's goals better. For short-lived up-to-date news we will rely on our newly created Web-page: have a look at it and give us your feedback! The Newsletter will appear once a year and will focus on topics directly related to the IFSR: Board Meetings and meetings of the Executive Committee, allowing you to get first hand information on the IFSR. The Fuschl Conversation will be given a prominent place. Every odd year we will give a preview of the next Fuschl Conversation including information as how to participate. In even years we will report extensively on the past Fuschl Conversation. We will also report on the activities of our member societies, on the contents of the Journal of Systems Research and Behavioural Science and on past conferences. The Calendar of Events and the announcement of conferences will be discontinued.

Give me your feedback!

Gerhard Chroust

#### Message from the President of the IFSR:

I am strongly of the opinion that *systems science* as the unifying linkage theory between natural sciences and social sciences and at the same time as the unifying linkage theory between macroscopic structures and microscopic events is an issue of key importance among systems scientists. It is therefore time to form within the IFSR an international forum mainly based on internet technology in order to communicate our ideas among individuals and member societies. During my presidency I will try to foster this aim, especially in view of questions of the global crisis in the 21<sup>st</sup> century and in view of a dialogue between East and West. An international conference on "the global crisis in the 21<sup>st</sup> Century: diagnosis and prescription" in May 3 - 4, 2001 in Seoul, Korea will be an important forum for exchanging ideas and potential solutions. Yong Pil Rhee

#### Message from the Secretary/Treasurer:

I am proud to have been elected again to the office of the Secretary/Treasurer, an office which I hold since 1992. Much has changed in the meantime, especially with respect to the financial situation of the IFSR.

When I took over a large percentage of the expenses of the IFSR were spent on the Newsletter. In the successive years we have gradually streamlined the IFSR Newsletter and at the same time have tried to improve the service provided by the newsletter. The income of the IFSR consisted essentially of a subsidy of the Austrian government and to a smaller part of the membership fees. Thus the budget of the IFSR was very limited, just enough to cover the essential commitments. Thanks to our past president and current vice president, Michael C. Jackson, we now have a flourishing Journal of Systems Research and Behavioral Science which provides a considerable amount of royalties. This money can now be used to take up some pro-active, future-oriented initiatives. We will report on them in the Newsletter. Thus I can report that the budget of the IFSR is not only stable but actually increasing.

As in the past I will continue to act as the Editor-in-Chief of our Newsletter, and as you can see, there will be some changes, too.

So lets look forward to a more active IFSR and help us, the Executive Committee, to take some new and bold steps into the future.

**Gerhard Chroust** 

# IFSR Board Meeting April 26, 2000

On April 26, 2000 the bi-annual Board Meeting of the IFSR was held in Vienna with 11 members represented. The Executive Board gave an overview of both the activities and the finances of the past two years. In his address to the Board the outgoing president, Prof. Mike C. Jackson, in his

# Message of the Past President and future Vice-president

I would like to start by thanking all the other officers of the IFSR for making my time as President (1998 - 2000) so enjoyable and, I think, productive. Thanks, therefore, to Professors Gerhard Chroust, Yong Pil Rhee and Bela Banathy. It is due to their help and encouragement that I am happy to remain on the IFSR Executive Committee as Vice President for the period 2000 - 2002. Thanks also to all those who voted for me to continue to serve IFSR in this new position!

I would like to highlight just 3 of the achievements of the Executive Committee while I have been President.

First, Systems Research and Behavioral Science has been put on a sound financial footing. This is undoubtedly, now, the leading international systems journal and is starting to bring considerable royalty income to the IFSR. If you do not already subscribe, please write to me and I will ensure that you receive a complimentary copy and subscription form. Second, we have established more regular contact with all the member societies of the IFSR, and usually be e-mail. This should lead to greater understanding, among all those involved, of what is going on in the international systems community eventually, to a greater synergy between our activities. The first fruit of this is the number of reports from member societies in this issue of the new style Newsletter.

Third, an achievement more of Prof. Magdalena Kalaidjieva than the Executive Committee itself, we have started to update and expand the IFSR web-site. We have high ambitions for this web-site in the future.

I look forward to the new initiatives that will be promoted by Professor Yong Pil Rhee, as your new President, and will continue to do all I can for the IFSR in the next couple of years.

#### The Board accepted

The Australia and New Zealand System Group (ANZSYS) as a new member (bringing the number of members to 29) and invited the Japan Association for Social and Economic Systems Studies (JASESS) to join the IFSR, The EC reported on the past two years, on Fuschl 1998 and Fuschl 2000.

The most important item on the agenda was the election of the new executive officers. Unanimously the Board elected:

President: Prof. Yong Pil Rhee

Vice-President: Prof. Michael C. Jackson Secretary/Treasurer: Prof. Gerhard Chroust

Some of the key decisions made at the Board meeting were:

- ?? We are (re-)introducing two classes of members: full members and associate members. The latter category is thought for very small organisations or organisations just in their early formation.
- ?? The Newsletter is being be changed to the new format which you see here
- ?? Given the better budgetary situation of the IFSR we will try to start projects and to encourage more systems work.
- ?? The following committees were established:

- Planning Committee for the Fuschl Conversations.
- o Committee for planning and implementing the Web-site
- Advisory Committee

The following projects will be initiated:

- ?? Systems Education (B.H. Banathy): Not systems engineering, but systems research to evaluate Systems Education at various levels. This was thought to be an essential project. Globalisation (Y. Pil Rhee): Systems solutions to the global crisis. There is to be an international conference next year dealing with this topic.
- ?? Foundations of Information Science (B.A. Banathy)
- ?? Systems East and West (Dr Z. Zhu): This is an ongoing programme to forge links between the East and West.

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Board Meeting, April 26, 2000: from left to right: C. Malemprez, D. Dubois, G. Klir, M.C. Jackson



Board Meeting, April 26, 2000 from left to right: D. Gibbs, Ch. Francois, G. Metcalf, R. Pla\_Lopez, A. Casselles, M. Rhee (as guest), Y.P Rhee



Board Meeting April 26, 2000 from left to right: M Mulej, V. Pozdinukov (guest) , St. Umpleby, M. Kaladjeva, G. Klir, M.C. Jackson, D. Gibbs, C. Francois.

# Meeting of the Executive Committee, July 1999



EC Meeting in Monterey, USA, July 1999 (Prof. Yong Pil Rhee, Prof. G. Chroust, Prof. B.H. Banathy, Prof. M.C. Jackson)

The EC held a meeting on July, 27 and 28, 1999 to take stock of the situation of the IFSR at half term. Prof. B.H. Banathy, former president of the IFSR also took part. The financial situation of the IFSR was discussed together with plans for the future. The activity of the members was one topic and a change in policy with respect to the IFSR Newsletter. A fresh attempt will be make the IFSR a more interactive federation.

A second EC meeting took place in Vienna on April 25, the day before the Board Meeting. The Board meeting was prepared, including a slate for the new Executive Committee.



EC Meeting in Monterey, USA , July 1999 Prof. G. Chroust, Prof. Y. P. Rhee, Prof. B.H. Banathy

IMPRESSUM: Mediuminhaber, Herausgeber, Satz und Layout: Int. Federation for Systems Research. F. d. Inhalt verantwortlich: Prof. G. Chroust, Kepler Universität Linz, 4040 Linz, Druck: Hausdruckerei Kepler Univ. Linz (A)

### **Fuschl Conversation 2000**

The Fuschl Conversation 2000 took place from Sunday, April 30 to Friday, May 5, 2000 at Hotel Seewinkel, Fuschl am See, Austria.



Hotel Seewinkel in Fuschl

To a considerable extent it was a continuation of the Conversations held in 1996 and 1998. It comprised four (each led by a Group Coordinator) which had chosen the following topics:

The Y3K Solution: Repositing the Ideal Seeking Social Systems Design (Coordinator: Gordon Dyer)

Awareness and Social Systems (Coordinator: Gary Metcalf)

Design of Disciplined Inquiry on the Foundation of Information Science (Coordinator: Soeren Brier)

Designing Systems For Human Betterment (Coordinator: Arne Collen)

In total 21 participants attended the Conversation in Fuschl,

coming from 11 countries on 3 continents.

The proceedings of the Conversation will be published in winter 2000.

Below you find a general discussion of the Learning Aspects of the Fuschl Conversation by Gordon Dyer, followed by the summary reports of the 4 groups.



Lake Fuschl with the Hotel Seewinkel

# Development of a Learning Community at Fuschl 2000

#### A retrospective by Gordon Dyer

Special steps were taken at Fuschl 2000 to develop a learning community. There were two objectives in this:

- (1) to respond to feedback from previous conversations that it was very easy for groups to get so locked into their own discussion that the inter-connecting features of group discussions and processes were overlooked, and thus the potential for learning was not maximised
- (2) for participants to share ideas on how conversation methods might be introduced into their own communities.

Time was allocated within the plenary sessions to discuss and record common experiences and conclusions emerging from individual group presentations. In this way it was hoped that the groups would learn from each other and then reinforce this learning in their on-

going group work. Plenary sessions were held on Monday and Tuesday evenings to allow groups to report on their interim progress, with a final plenary on Friday morning. The evening sessions were one hour long, the final session 2 hours. With 4 groups, each had 15 minutes in the evenings and 30 minutes in the final session, but they were briefed to use about  $1/3^{\rm rd}$  for their presentation and  $2/3^{\rm rd}$  for plenary discussion. Gerhard Chroust acted as timekeeper and Gary Metcalf volunteered to identify and to record similarities and connections between reports of at least two groups. These were categorised in the form of

- (1) common activities that groups did, and
- (2) common issues explored.

The final presentation session was extended to allow a "conversation about the conversation". Some key points were:

(1) the attempt to discuss the inter-connections between the four groups' work was welcomed, and recommended as a feature of future conversations. The list of common activities and issues explored may also be useful to guide future conversation groups. Theses will be published in the full report.

(2) a discussion around the trigger question "How can we take what we have learnt at Fuschl and apply this to our own communities and contexts".



G. Dyer, C. Francois, M. Bazewics, S. Brahms, C. Hofer, G. Ossimitz, A. Casselles, G. Rowland

It has always been the hope of Fuschl stewards that participants will contribute to the dissemination of the conversation method by applying it in their own communities. It is recognised that in doing so they would need to adapt the conversation method and rules for their own context. Suggestions for the possible application of conversation were sought from participants via a "valuation" questionnaire. Ideas included suggestions to use conversation methods:

for building a research team for an internationally organised project in university and research activities

as an approach in blocked seminars

for shifting mind-sets at workshops and seminars

for seminars or a faculty retreat at home University

for building the sense of community amongst local school staff

with small groups of students at school to improve social dynamics of a small group for quality circles

There was shared recognition that the conversation format is a powerful and potentially beneficial method for any small group to learn together. However, initially if working with non-academics it may need to be more problem-oriented. After some

experience, more general topics might be used.

Three recommendations then arose for future planning:

- ?? that a number of students should be invited to Fuschl 2002 with the assumption that their College would be prepared to fund them.
- ?? forming an Action Research Group for Fuschl 2002. The hope was that this would allow for sharing of experience of active case studies involving use of conversation and/or social system design



G. Minati, S. Brahms

?? The poverty of the English language to describe many of the social systems ideas discussed at Fuschl was evident. Yet, ethnic words can provide a much more sensitive appreciation. For example, the word "palaver", in Swahili it means an extended discussion within a village community to reach agreement, i.e. it is very close to the ISI-style of conversation. We noted the sad legacy of history that ethnic words like this were incorporated into the English language they often assumed a pejorative meaning. It is recommended that a glossary of ethnic compiled to convey sensitivities of systems design that we Colleagues globally are invited to provide suggestions and comment.



C. Francois, M. Bazewics, S. Brahms, C. Hofer, G. Ossimitz, A. Casselles, G. Minetti, A. Collen, G. Metcalf

### **Evolutionary Guidance Towards the Year 3000**

Gordon Dyer (Coordinator) (UK) Sabre Brahms (US) Yoshi Horiuchi (Japan) Lynn Jenks (US) Gordon Rowland (US)

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This report summarises the progress made by the so-called Y3K Group during the 10<sup>th</sup> The idea for Biennial Fuschl Conversation. naming the group had been suggested by Gordon Dyer and Gordon Rowland in March 1999, triggered by a climate of concern generated over the so-called Y2K problem the fear that a large number of the world's computers might crash on the changeover from 1999 to 2000. In the event, the predicted Y2K disaster was largely a non-event - a technological problem was cured by a

technological fix.



Y. Horiuchi, C. Francois, M. Bazewics, S. Brahms, G. Ossimitz

In the view of Rowland and Dyer, this simple technological problem was much problematic and less serious than the issue of "what would we as systems designers wish to see for mankind for the Year 3000". Our consciences and senses told us that the world that mankind had created was in a sorry mess. For instance, the gross inequalities of wealth, undeserved power and opportunities that still exist between nations and peoples, continuing wars and terrorism; a global spread of horrific diseases, drug related crime and perhaps most worrying the concerns with Planet Earth itself as it suffers from pollution and global warming. Thus Y3K became a metaphor for a much more desirable future. The choice of Y3K to focus the vision was deliberate in that it is far enough away for it to be removed from our current biases and to be NOT predictable on the basis of our current knowledge and technology. With a systems design approach we have the chance to create a vision of what we want and then begin a design process towards that vision. It also forces us to think and not rest on the assumption that everything is too difficult and that nothing can be done. Something ought to be done if we and succeeding generations take responsibility to continue to design the future and not just let the future happen. Yet too, our work must be framed within a guiding principle of system design that "it is unethical" to design a system for someone else. At best we can provide an outline, a set of markers, to help current and future generations to follow.

The aim for an outcome from this initial Fuschl conversation could not be very ambitious. We hoped that we might be able to achieve some markers for action in our lifetimes that we might be able to begin today which will take us towards a vision of a more desirable vision of global humanity in 3000 and not away from it.

All members of the Y3K team expressed satisfaction at what they had gained from the week. At the start of the conversation no-one had a very clear idea at the direction that would be taken or what to expect as outcome. So there was a collective sense of surprise at the feeling of progress we shared. We found some very rich trigger questions to stimulate fundamental reflection on what it means to be and to remain human, and whether the human species has an immutable connection to the Planet Earth through its place in a complex "chain of being".

We were able to begin visioning for 3000. We did this through consideration of what we would miss from our heritage and the present, still to be found, or be if it were not disappointed with if it were still not achieved, or have ambition for, by that future. conversation was not without obstacles. Given the topic and the variety of perspectives that the team represented it was not surprising that we needed to take stock and review our conversation process from time to time. We found it impossible to reach consensus on a set of assumptions to make for 3000 but we by-passed this difficulty by asking a different but related question.

An exploration of an Okinagan model of group discussion coupled with an "I in We" and "We in the World" levels of systems perspectives gave fruitful insights towards six principles which constitute an EGS for the Year 3000 or similar long term future. These were:

Movement towards WHOLENESS and greater levels of complexity

BALANCE (in emphasis and in elements informing each other) among perspectives and orientation

Preserving and increasing DIVERSITY o human and other organisms

Enriching human experience: RICHNESS Increasing dispersion of benefits: DISPERSION

HARMONY among the five principles given above

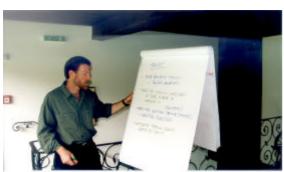
We also identified some markers in terms of desirable behaviour patterns for the Year 3000. These desirable behaviours provide a basis for considering future education and human development programmes, which will be worthy of exploring in future conversations. A search for a richer systems vocabulary and language base was also identified as a direction for future work.



Gordon Dyer's team at work

### Awareness and Social Systems

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G. Metcalf

The pre-conversation phase started in February 2000 with an introduction among the participants of the group. Gary Metcalf proposed to deal with the subject "Awareness and Systems" not on the level of theoretical reasoning about "What is awareness?", but through using concrete examples of political, economic and ecological systems through newspaper or journal articles, which might help

to find general principles of about awareness within social systems. After some negotiation the group decided to deal with the very up-todate problem concerning the "Jörg Haider issue" as an example within a political system (see note at end!). The participants were asked to bring some newspaper clips concerning that issue with them. Günther prepared a paper about the conflict theory of Gerhard Schwarz, which could be used as a theoretical background for analysing the "Haider saga." Charles provided a great deal of information (and experience) in systems theories. Antonio information from economic systems, especially as described by systems dynamics. question of modelling systems, and of what this has to do with the awareness of systems, was an issue throughout the conversation.

The conversation in the group at Fuschl started with an input of Charles concerning several dimensions and triggering questions

concerned awareness (of social systems). Different facets of the "Haider saga" were provided mainly by Günther, interrupted by short phases of theoretical reflection. It turned out that both the rise of the Freedom Party under Haider (from 5% of voters in 1986 to 28% in 1999) and the reactions about this both within Austria and within the European Union are deeply rooted in a conflict scenario with some striking inner logic. On Tuesday afternoon the issue was postponed for a while and the focus was shifted to the question of modelling economical systems, to investigate what connections might be found between political and economic systems.

A. Casselles, C. Francois, G. Ossimitz
On Wednesday morning the Haider issue reappeared. Questions of how it might possible to more concretely model this situation, and a proposal of the factors involved, were introduced by Antonio. The group ended up with some insights about the driving forces behind social (especially political) systems and the fundamental difference between qualitative and quantitative modelling.

On Thursday morning Antonio brought in a concrete concept of how the Haider issue could be transformed to a semi-quantitative model. After some discussion about the implications of what actually making such a model would imply we tried to conclude about

the finding we made about inducing awareness within social systems. Two new systems concepts were introduced by the group: systemic integrity and reflective systemic properties. An extensive reflection upon the whole progress of the conversation, including some very deep conclusions about the evolution of awareness within social systems, finished our group work at Fuschl.

Note: There was a worldwide outcry about the fact that Austria's "Freedom Party" (FPÖ, leaded then by Jörg Haider, which got about 28% of the votes at the national election for Austrian Parliament in Autumn 1999) formed a "Österreichichische coalition with the Volkspartei" (ÖVP, a Christian democratic party with almost exactly the same number of votes as the FPÖ), thus expelling the Socialist Party (SPÖ, 36%) after 30 years from the position of a "Prime Minister Party". Even before the coalition between FPÖ and ÖVP had even be signed, the other 14 countries had decided upon formal coordinated bilateral sanctions against the Austrian government, saying that an extreme right wing party (some even compared Haider with Hitler) should not be allowed to be in the Government of an European Union member country.



M. Bazewicz, F. Stallinger, G. Dyer

# Design of a Disciplined Inquiry on the Foundation of Information Science

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The objective of the conversation was to discuss the foundations of information science in a broader socio-technical context. Based on Soeren's manuscript 'Cybersemiotics – a Trans-Disciplinary Framework for Information

and Communication Studies' the group began the discussion on the limitation of the information processing paradigm.

The limitation of this paradigm and the influence of a strong AI research program in

dealing with the meaning aspect of human language communication were discussed, especially from the viewpoint of syntax versus semantics. It was agreed that a true of information, transdisciplinary theory cognition, and communication should be able encompass not only technical communication (cf. Shannon's theory of communication) but also animal communication and human communication through language. The discussion of what actually constitutes a language, revealed that social sciences and computer sciences seemingly use different definitions.



M. Bazwiccz, A. Combs, G. Chroust, S.Brier, M. Kalaidjieva, G.A. Swanson

specially concentrated on natural languages; they demand not only a generative and context-sensitive syntax but also contextsensitive semantics (pragmatics). It was pointed out that basic characteristics of biological systems like autopoietic structure and motivational mental processing seemed necessary to establish any kind of semantics. But the motivational structure of living system alone seemed not to be sufficient to establish a meaning-structure at the conscious level. So we found it necessary to include the psychological and social level of intentionality including motivational ordering of embodied metaphorical concepts.

We established that the understanding of messages could not start with an objective concept of information in nature but as a prerequisite has to include humans in a social structure comprising a body and psyche with inner (emotional) life. The group's attention was therefore directed to the discipline of semiotics that deals with how signs get meaning in the context of living and social systems (biosemiotics).

Based upon Charles Sanders Peirce's triadic system levels (syntax, semantics and pragmatics) pragmatic and transdisciplinary semiotics was focussed upon. It is based on a philosophy of 3 categories, the firstness, secondness, and thirdness based on a revision of Kant's philosophy. But contrary to Kant's mind-based categories Peirce's categories each represents a fundamental aspect of mind and nature and cognition. Special interest is

that Firstness represents qualia and feeling as a basic feature of reality existing by itself in an unmanifest state. Objects are only secondness and they are considered along with force and will as constraints on our perception of reality. Thirdness represents mediation between firstness and secondness. It is the habits of nature and mind that leads to understanding. The process of semiosis (signification) is modelled over this scheme, where the primary sign or the representamen (firstness) refers to the object (secondness) through establishment of an interpretant in thirdness.

This process of signification continues throughout history in a sign-web. So every sign is connected to other signs in a sign-web. An object can be a representamen to somebody else. An interpretant can be the representamen for somebody else. So your interpretation can be a sign of your understanding of a message for others. The meaning of a sign is what it does in the biological, psychological and social systems. Peirce's criterion of meaning is pragmatic. The meaning of a sign is constantly evolved/revised through the ongoing social dynamics of the web of other sign it is connected to, such that the production of meaning is a continually evolving process. In this context the basics for the construction of a second-order knowledge base via expressed in natural language were shown.



A. Combs. S. Brier

This process is not only working at and with the social communicative level, it is working at all three levels at the same time: the socialcommunicative, the mental-psychic, and the biological-autopoietic, producing embodied socially meaningful concepts. The flow of sign in society can be seen as going through or being expressed by various specialized channels (what Luhmann calls 'generalized media') such as money, power, science, art and love. Each functioning on the basis of its own reduced code (i.e. representation of

reality).

S. Brier, A. Combs, M. Bazewicz, G.A. Swanson, M. Kalaidjieva

The attention moved to the immense influence of money-markers in the communication of power in modern society. The increasingly faster development of money marker systems (electronic commerce!) takes power both from the brute-force systems and the other information systems. Further studies of this aspect are needed.

At this point a general discussion of hierarchies was conducted. Several types of hierarchies were offered to the group: the seven layer ISO/OSI model of computer communication, a morphological systems inquiry model with 5 levels (from hardware to human activity) and a 7 level model of equilibrium and processes (from atomic structures to social activities). An elaborate theory of hierarchies to unfold the different components and layers of information and communication systems was also discussed.

In an attempt to consolidate the findings a map of relations was drawn: Consciousness at the core level is associated with sensations such as the sensation of tea (firstness), which build on the experience of tasting of tea with and pleasant feelings emotions (for consciousness, secondness) that give rise, through images, to reflections, thoughts, concepts, and languages (thirdness) about the nature of the tea - all of this occurring at the level of conscience experience. Such concepts can be expressed through speech or written language codes. These can be communicated Shannon-Weaver-type channels communication by appropriate coding and transmission from senders to receivers using any appropriate technology for the channels such as encoded pulses of energy, including feedback to ensure correct transmission. As long as the meaningful social context and praxis the original uuencoded concepts related to is remembered as where "the difference that makes a difference" was established, their meaning can be established.

The basis for this core consciousness and intersubject communication is probably established in the early development of hunter/gather society that functioned migrating bands with social work division that allowed for hunting and raising of children with still growing brains. This biological, sociological and psychological organisation and the feeling communality and common linguistic communication system seems to be the process creating the self-conscientious sociallinguistic human being we know to day. The early stages of language development seem to have been decisive for later development of the brain

The consequences with respect to the future for development of computer communication and the Internet is that they should be designed as to promote social sharing of meaning, values, and collective consciousness on a global scale in order to heal some of the fragmentation of modern society arising from some of the extreme developments of individuality of modern society.

The trust and corporation spirit making synergetic effort like the SETI-project of sharing PCs for computing analysis of noise from space in searching for extra-terrestrial intelligence was acknowledged, as was the immense intellectual exchange going on in a very helpful manner globally.

Information stress was a further topic. We have too much information, what we want (and need) is knowledge designed for our purposes. The pro and cons of distance education were elaborated. The wonderful possibility to use universities and experts all over the world and exercising this chance when one has time was appreciated. But the lack of personal presence and the growing exploitation of family and free time were seen as a growing problem. Distance learning is often used to reduce expenses without realizing the essential function of personal dialogue for human education. It was also observed that students enter distance education with wrong expectations due to underestimating the real effort involved in following such courses. It is essential that the teacher get paid to have enough time to dialogue with the students and that at least two to three full-body meetings are conducted with the teacher for all, or at least among students living fairly near each other.

### Designing Systems For Human Betterment

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The process of the conversation consisted of an initial phase to orient the team to the task, followed by agreement on a design to conduct the sessions over the four days together as well as in relation to the other conversation groups. The heart of the process transpired over the middle two days culminating in an integration of contents produced into a draft for the group report by the last day.



A. Collen

Implementation of the design the first day involved a divergent analysis of the key constructs in the theme: designing, system, human, and betterment. This phase was followed by a convergent snythesis toward reconstitution of the theme in more specific The second day continued the terms. reformulation of the focus, which subsequently led to the formulation of a set of 9 essential characteristics for designing systems for human betterment. The nine characteristics defined were: emergence, goal, diversity. stakeholders. creation, acceptance, co-evolution, continuation, and ethics. On the second and third day, these characteristics were then applied to six areas of application: education, systems therapy, the consumer protection, usability internet, interface, and research participant protection. The conversation moved toward closure by means of writing individually and in teams, then corroborating aspects of the group report, and finally planning the presentation of our process and results to all participants on the fourth day.

The content of our conversation focused on the difference between the idea of designing a system and designing a system for human betterment, designing a system and designing systems, and conversing as a design team and working openly with the co-evolutionary dynamics of conducting a designing process. We further noted betterment as a complex construct and chose to examine its importance as an emergent property. Taking into count the participation and acceptance stakeholders, who are also the designers as well as others who may be affected more indirectly, became salient influences upon our thinking throughout the conversation. Systems for human betterment meant an increase in personal satisfaction, but can also bring beneficial consequences at more collective levels of human organization. There were implicit sub-themes over the course of the conversation, for example, that betterments need to be accessible to everyone at the effect of the systems designed, and there is an ethics inherent in designing and the systems designed which likely needs to be made more explicit as the conversation progresses and the betterments emerge.



C. Hofer

Finally, our conversation found that the combination of articulating and testing of the key constructs and essential characteristics with real world applications was a constructive means to conduct and then successfully conclude the conversation.

The fruits of the conversation were not only the personal experience with and knowledge gained about conversation design and collaborative inquiry through conversation for the team, but also the methodological products

(conversation design, construct denotation, essential characteristics, foci of application, and linkage matrix) that can assist teams designing systems for human betterment.



# IFSR's New Web Site : <a href="http://www.ifsr.org">http://www.ifsr.org</a>

Thanks to the effort of Prof. Magdalena Kalaidjieva the IFSR has now a representative

web site which will be enlarged and enriched in the near future.



#### Members of the IFSR

The IFSR is proud to have the following associations at its member:

(to reduce space we have only listed either an email-address, a fax- or telephone-number or an address)

American Society for Cybernetics

email: asc@gwis2.circ.gwu.edu http://www.asc-cybernetics.org

Asociacion Argentina de Teoria General de Sistemas y Cibernetica

email:library@iafe.uba.ar

Asociacion Mexicana de Sistemas y Cibernetica

Antonio Sola 45, Col. Condesa, C.P. 06140, Mexico

Association Française des Sciences et Technologies de l'information et des Systems

www.afscet.claranet.fr

Australia and New Zealand Systems Group (ANZSYS)

email: w.hutchinson@ecu.edu.au

Bulgarian Society for Systems Research

email:ZAPRYAN@bgcict.acad.bg

CHAOS - Centre for Hyperincursion and Anticipation in Ordered Systems

email:Daniel.Dubois@ulg.ac.be

http://www.ulg.ac.be/mathgen/CHAOS/CHAOS.htm

Gesellschaft für Wirtschafts- und Sozialkybernetik

email:schiemen@wiwi.uni-marburg.de

Greek Systems Society

Dr. Michael Decleris, 82 Fokionis Negri Street, GR-11361 Athens, Greece

Instituto Andino de Sistemas (IAS)

http://www.concyte.gob.pe/ias/cereco.htm

Instituto Mexicano de Sistemas

Dr Jorge Diaz Padilla, Apdo. Postal 20276, Admon de Correos, Deleg. Alvaro Obregon, 01000 Mexico,

Int. Society for the Systems Sciences (ISSS)

email:GASwanson@tntech.edu

International Systems Institute

email:bhbanaty@aol.com

Italian Association for Research on Systems

email:gianfranco.minati@iol.it

http://ginevra.usr.dsi.unimi.it/AIRS/

John v. Neumann Society for Computing Sciences

http://www.njszt.hu

Management Science Society of Ireland (MSSI)

Dr. Cathal Brugha, tel:(353)-1-7068132

Oesterr. Studiengesellschaft für Kybernetik (OeSGK)

e-mail: Robert@ai.unvie.ac.at

Polish Systems Society

email:bazew@pwr.wroc.pl

Polski Towarzystwo Cybernetycne (Polish Cybernetical Society)

Prof. Piotr Sienkiewicz, Mokotowska Str. 24, PL-00-561 WARSAW, Poland

Slovenian Society for Systems Research

email:dragicy.roser@uni-mb.si, MULEJ@uni-mb.si

Sociedad Espanola de Sistemas Generales (SESGE)

email:antonio.caselles@uv.es

http:/www.uv.es/~pla/SESGE4

Society for Cybernetics and Systems Research

School of Business Administration, Oakland University, Rochester, MI 48309-4401, USA

Systeemgroep Nederland

email:FELIX@siswo.uva.nl

Systems Engineering Society of China

fax:(86-010) 62568364

**Technology Transfer Center** 

Dr. M.N.B. Aviku, P.O.Box M-12, Accra, GHANA

The Korean Society for Systems Science Research

email:rheevp@snu.ac.kr

The Learned Society of Praxiology

email:WGASPARS@IFISPAN.WAW.PL

The Society of Management Science and Applied Cybernetics

Prof. Dr. A. Ghosal, O.R. Unit, C.S.I.R. Complex, N.P.L. Campus, New Delhi 110012, India

United Kingdom Systems Society

email:M.C.Jackson@hubs.hull.ac.uk, D.E.Gibbs@hubs.hull.ac.uk

candidate:

Japan Association for Social and Economic Systems Studies (JASESS)

Email: Yoshihide HORIUCHI horiuchi@u-shizuoka-ken.ac.jp

Some of our members have submitted detailed descriptions of their work and plans. They are listed below.

# American Society for Cybernetics(ACES)

During 1999-2000, the ASK officers have engaged in various activities intended to engage the participation of a broad membership. This has included development of a master membership list and the distribution of a number of membership invitation letters. A major effort has been given to designing, developing and operating a consolidated website, designed to provide the Society with an informational forum, and provide a vehicle for members to contribute materials and have interactive exchanges. We have initiated the ASK Pages in Cybernetics and Human Knowing, wherein the Trustees of the society, each in turn, present a brief paper. We have produced a video of Dr. von Forester and Dr. Maturing in conversation, and reinstated a series of occasional monographs. Records and publications of the Society have been consolidated and submitted to the University of Illinois for archiving.

In addition, members of the Society and the officers have represented the society at conferences and meetings of the SIS and the AAAS. The ASK is a co-sponsor of the World Congress of Systems Sciences in July, 2000.

Over the next year the ASK will be involved in organizing a conference to be held in Vancouver, B.C. Canada, May 26 -May 28, 2001 on the Cybernetics of Praxis and the Praxis of Cybernetics. The Society plans to expand its new website. and to use it to evoke interest in, and coordinate activities around, the upcoming conference. We anticipate continuation of the Occasional Monograph series, and will continue with active recruitment of membership, especially among young people. We shall also actively explore alternative funding for the work of the Society. For details contact:

Dr. Pile Funnel, President American Society for Cybernetics 2366 West 18<sup>th</sup> Ave. Vancouver B.C. VAL 1A8, Canada

Phone: (604) 732 - 9864 fax: (604) 732 - 9834

#### Association Mexican de Sistemas y Cibernitica

Our Association is in a re-structuring phase. Mainly working in the academic field, our members are from the Systems Engineering, Industrial Engineering and Management Sciences programs, from several Mexican schools and faculties.

We were preparing a Ph. D. program in Systems Engineering, at the Polytechnic Institute of Mexico, but unfortunately it is not yet ready.

Nevertheless, we are continuing working mainly for the Systems Engineering Master Program, which is based upon four areas: Operations Research, Socio-Technical Quality Systems, Information Systems and Production Systems.

A particular area of recent work of some of us deals with modelling and simulation of manufacturing systems. Considering the difficulties in research on physical facilities, we are interested in simulation, working with computer-based "virtual factories" to experiment with, mainly under abnormal situations, in order to develop appropriate recovering strategies.

We try also to reinforce the number of our members in this re-organization of our Association. An important part of this are the international links and academic exchanges.

Dr. Jorge Rojas Dr. Eduardo Oliva-Lopez

### Asociación Argentina de Teoria General de Sistemas y Cibernetica

Activities in 1999 and 2000:

Participation to the ISSS joint Conference in the U.S. and in Lima, Peru.

Prof. Enrique Herrscher represented us at the U.S. Conference (Asilomar, CA). Meanwhile Charles François, Hon. President, was in Lima taking part to the Sistemica 99 Conference organized simultaneously by the Instituto Andino de Sistemas, partly as a teleconference, in connection with Asilomar. It should be noted that both conferences were also transmitted to a parallel session at Trujillo in Northern Peru. Some technical problems had to be solved, but this first example of a transcontinental conference was quite a success.

**Annual Meeting:** 

On November 12<sup>th</sup> and 13<sup>th</sup>, 1999 we organized our 8<sup>th</sup> Annual Systemic Meeting in Buenos Aires. The general subject of the meeting was: "Conflict and Negotiation: Systemic approach to business, educational, public health, legal and political aspects"

Sixteen papers were presented and widely discussed. The meeting could be considered a success and was also attended also by some representatives of various provinces of Argentina. The Proceedings are to be published during the current year.

Publications:

Our society published the Proceedings of the 1998 Meeting on "Enfoque sistémico de la Globalización", a collection of papers related to the trend toward worldwide globalisation in business and economy, but also considering its social, ecological and legal consequences observed from a systemic viewpoint.

A New Seminar on "Relation Brain and Mind" is presently in course of organization by Prof. Dora Gregorio, who teaches epistemology at Buenos Aires University and is a member of our society since many years. It will in principle meet every fortnight and consider the ways thought is produced by and related to cerebral activity, from perception to expression through language. Presently various members are busy reading significant literature on the subject and preparing translated summaries for participants who do not read English, French or German.

The seminar will have no time-limit. It may presumably lead to some publication.

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Charles Francois

# Association Française de Science des Systèmes Cybernétiques, Cognitifs et Techniques (AFSCET)

AFCET (Association Francaise pour la Cybernétique Economique et Technique), founded in 1968 and affiliated to IFSR, has been succeeded in 1998 by AFSCET, as far as systems and cognition are concerned.

The members of the Council are:

L. Mehl (President),

J.-P. Bois (Vice-President),

E. Andreewsky, E. Bernard-Weil, B. Bouchon-Meunier, D. Bourcier, J. Fuerxer, F. Le Gallou, J.-L. Le Moigne, J. Lorigny, P. Marchand, E. Nunez, L. Saint-Paul, R. Vallée, D. Vaudène. In 1999, after its first General assembly, AFSCET started the activities of its working groups which, in general, meet once a month AFSCET has established the following working groups:

Artificial Intelligence and decision processes (B.B.-M.),

Paradoxical strategies (E.B.-W.),

Regeneration learning (P.M.),

Systems approach of sustainable development (J.-P.B.),

Systems and biology(E.N.),

Systems and society (D.B.).

In September 1998 the 5<sup>th</sup> European School of Systems Science was held in Neufchatel (Switzerland), sponsored by AFSCET in cooperation with UES (Union Européenne de Systémique/Systems Science European Union).

In September 1999 the 4<sup>th</sup> Systems European Congress sponsored by AFSCET in collaboration with UES and University of Valencia took place in Valencia (Spain).

In March 2000 AFSCET organized a symposium on the many aspect of violence, seen from a systems point of view (Journèes de réflexion de l'AFSCET). It will be held in Normandy.

More details: AFSCET, Conseil d'Etat, Place du Palais Royal

75100 Paris 01 SP, France www.afscet.claranet.fr

Prof. Robert Vallée

# Associazione Italiana per la Ricerca sui Sistemi (AIRS)

The Italian Association for Research on Systems (AIRS) held yearly 3 general meetings in Rome and Milan. They had been dedicated to short invited Conferences on Cognitive Science and Biocomputing. Research activities have been presented on Ethics, Education, Medicine Law and Science of Complexity.

Members discussed published scientific papers and books. Attendants reported about the Fuschl Conversations. World wide activities on Systems sciences have been discussed as the ISSS Annual Conference. AIRS is also trying to organize the 6<sup>th</sup> European Systems School in Italy. AIRS is trying to organize the reprint in Italian of the von Bertalanffy classical book "General Systems Theory" out of print by many

years and no more available in Italy. A Website is under construction.

We established for the Y2K a meeting in collaboration with a Research Center on environmental research because of its interdisciplinary aspects: physics, chemistry, mathematics, economics, law, sociology. Another one in Ethics, Grow, Development and Sustainable Developments is expected.

Collaboration with some corporation on education is also possible.

Associazione Italiana per la Ricerca Sui Sistemi (AIRS)

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G. Minetti

### Australia and New Zealand Systems Group (ANZSYS)

The ANZSYS (Australia and New Zealand Systems Group) is not a conventional national society. We have no formal structure, but are a loose confederation of individuals and regional groups who keep in contact by a list server and an annual conference. It suits our geography!

The first conference was in 1995 at Perth (Edith Cowan University), then Melbourne (Monash University), Sydney (University of Western Sydney), Brisbane (University of Queensland), and Wellington (Victoria University). The last one in New Zealand was combined with the International Systems Dynamics Society conference. This year it will be in Geelong (Deakin University) and will be combined with the regional System Dynamics Society conference. The group is much broader than system dynamics and it is only a coincidence the last two have been combined.

We have no formal officers, and decisions are made about the location of the conference by a loose collection of 'old hats' who are interested. Anyone who comes can help decide, but it tends to be the ones who turn up regularly who seem to hold sway. So there it is. I run the

listserver. Anyone can join that by sending a request to:

anzsys@listserver.cowan.edu.au

We do not like junk mail and it has not been abused. We use it to advertise conferences, jobs, research opportunities and other news. Anyone can put a message on. The conference this year is called the International Conference on Systems Thinking in Management, 8-10th November, 2000.

Details on:

http://www.icstm.deakin.edu.au/2000/

Each conference organiser "owns" that year's conference, so gives it a different favour each year and each one is really different. It has been successful so far, this will be our sixth. They cover the costs, sponsors, etc., and keep any profits. I will suggest that the IFSR fees are paid each year by the host university. Next year, the conference is timetabled for South Africa, and 2002 it should be in Adelaide.

As we have no structure, I can be the contact point (w.hutchinson@ecu.edu.au) or one can communicate with all the members by sending a message to the listserver.

# Centre for Hyperincursion and Anticipation in Ordered Systems (CHAOS)

Activities in 1999:

Organization of the 3rd International Conference on Computing Anticipatory Systems, CASYS'99, Liège, Belgium

invited speakers: Karl Pribram - Edgar Mitchell, sixth man to walk on the moon.

Publications of proceedings: AIP Conference Proceedings 517 and International Journal of Computing Anticipatory Systems, volumes 5, 6 and 7.

For details see

http://www.ulg.ac.be/mathgen/CHAOS/news.html

Activities in 2000:

Organization of the 4th International Conference on Computing Anticipatory Systems, CASYS'2000, Liège, Belgium, August 7-12, 2000

invited speakers: Lotfi Zadeh, Founder of Fuzzy Sets –

Brian Josephson, Nobel Prize in Physics.
CASYS'2000 (7-12 Aug. 2000): http://www.ulg.ac.be/mathgen/CHAOS/CASYS.html http://www.ulg.ac.be/mathgen/CHAOS/CASYS.html

for CASYS'97/98 Proceedings Tables of contents and Report on CASYS'99:

http://www.ulg.ac.be/mathgen/CHAOS/news.html

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E-mail Daniel.Dubois@ulg.ac.be

### Gesellschaft für Wirtschafts- und Sozialkybernetik (GWS)

The annual GWS Conference 1999 was held at Saarbrücken University on "Systems View and Virtualisation" (Systemdenken und Virtualisierung)

The main theme of the past conference was the discussion of strategies for vitalisation and virtualisation of enterprises. Today's companies need a holistic understanding of their organisation as a viable system. Quick changes of markets and available information technology require a new definition of the sessions several companies edge. ln strategies for virtualisation, structural and cultural aspects of virtualisation, organisational virtualisation and intelligence and knowledge management in virtual organisations were discussed.

Presentations of Prof. Laszlo "A Systems View of new Business Ethics" and of Prof. Mertens

"Virtual Enterprises - Virtual States" discussed new aspects in the field of virtualisation.

The next annual GWS Conference 2000 is scheduled at Mannheim University for September 29-30, 2000 with the title: Decision-Making in Complex Environments (Entscheiden in komplexen Systemen)

Special interest will be given to the Topic "Systems Thinking and Simulation".

More information: <a href="http://iswww.bwl.uni-mannheim.de/gws/default.htm">http://iswww.bwl.uni-mannheim.de/gws/default.htm</a>,

Univ.-Prof. Dr. B. Schiemenz c/o Philipps-Universität Marburg FB Wirtschaftswissenschaften, BWL I Am Plan 2 D-35032 MARBURG tel:(06421) 28-1717, -1718

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### Instituto Andino de Sistemas (IAS)

The Andean Institute of Systems - IAS, from Lima, Peru is a non profit organization dedicated, since 1990 to teaching, researching and publishing diverse topics related with Systems Thinking and related disciplines (Informatics, Computing, Telematics), having as a central focus of work to the Andean Region and the Latin American context.

From June 27<sup>th</sup> to July 29<sup>th</sup> 1999, the IS jointly with the International Society for the Systems Sciences - ISSS performed the 43<sup>rd</sup> International Meeting of the ISSS (Asilomar, USA) and the 3<sup>rd</sup>. International Working Conference of IAS: SISTEMICA'99 (Lima - Perú), doing for the first time in the history of the ISSS a jointly Conference with a remote site, this was the IAS, at Lima - Perú. (More information in

#### http://www.concytec.gob.pe/ias/siste99.htm)

Now it is planned to repeat the experience with the World Congress on Systems Sciences to the held in Toronto, Canada and us as a remote site for next July 17<sup>th</sup> to 19<sup>th</sup>. Round tables and plenary sessions on both sides (Toronto - Lima) are planned to present at that time.

During the year 2000, the IAS is developing its IV Annual Training Program in Systems Thinking, composed by around 25 seminars, workshops and 2 main International Conferences done jointly with other recognized academic institutions.

The seminars and workshops cover topics on Soft Systems Methodology (SSM), Meditative Total Quality Management (MTQM), System Dynamics Methodology System Dynamics (SD), Systemic Strategic Management, Strategic Control with Expert Systems, Balanced Scorecard with System Dynamics, Strategic Marketing and Marketing Simulation, Systemic Project Management, Object Oriented Analysis and Design Methodologies, Systemic Mediation and Conflict Resolution. (More information in http://www.concytec.gob.pe/ias/capa2k.htm)

In the same line, IAS collaborated, as every year, to set up the XIII Latin American Congress on Strategy, which was held in Puebla, México last May 6 to 8, 2000. (see <a href="http://www.concytec.gob.pe/ias/slade.htm">http://www.concytec.gob.pe/ias/slade.htm</a>)

and is planned in the short term to announce the 4<sup>th</sup> International Working Conference of IAS: SISTEMICA'2K for next November, 2000. IAS has published at the moment 7 publications and have participated in the edition of 4 more, written in Spanish and English (More information in <a href="http://www.concytec.gob.pe/ias/publi.htm">http://www.concytec.gob.pe/ias/publi.htm</a>).sow 5 more publications are planned to be done in the short term.

An additional important activity where IAS researchers are dedicated is in the setting up of what we called the "Collective Brain Project" following the ideas of our dearest great collaborator, Prof. Rafael Rodríguez-Delgado,

Honorary President of the Spanish Society of General Systems (SESGE). This project started last December, 1999 and has as aim, to be a cooperative of knowledge on systems thinking applied to diverse disciplines and exploiting all the resources as possible in the www, in order to clarify and give support to

decision makers at any level and in real time, in order to build a better world for us and next generations. More information:

http://www.concyte.gob.pe/ias/cereco.htm)

Ricardo Rodríguez-Ulloa

### International Society for the Systems Sciences (ISSS)

The International Society for the Systems Sciences (ISSS) continues to expand its facilitation of research in the systems areas. 1999 Annual Meeting at Asilomar California drew between 150 and 200 participants from many parts of the world, activating new relationships among different groups of systems thinkers and reactivating The Electronic Information others. Infrastructure Committee met for the first time and initiated bold plans for expanding the ISSS Internet services. These plans are being implemented on an ongoing basis by this extraordinary team of volunteers. Also at the Asilomar meeting a pilot program for annual meeting distributed sites was successfully conducted with a Peruvian site. This program is expected to be continued with the 2000 meeting in Toronto and expanded in 2001 to include Bulgaria among other areas. The World Congress of Systems Sciences/2000 ISSS Annual Meeting (with some twenty cohost systems organizations) promises to be a truly Millennium event, as the City of Toronto is billing it in their publicity. The ISSS membership and attendance at our annual meetings continues to be about 50% from countries other than the United States. The leadership of the Society is very aware of the importance of this international forum for systems scientists, now lasting more than four decades. We are always ready to help facilitate your efforts and those of your organization in research and education in systems thought.

c/o Dr. G.A. Swanson, Tennessee Techn. University, Box 5024 COOKEVOILLE TN 38505, USA

tel:(1)(931)-372-3883 fax:(1)(931)-372-6249 email:GASwanson@tntech.edu

G. A. Swanson

# International Systems Institute (ISI)

The International Systems Institute (ISI) is a non-profit, public benefit, scientific, and educational agency. It is organized as a community of ISI Fellows, who are working year around in research teams. ISI is a member of the International Federation of Systems Research.

The ISI Community applies systems and design thinking in:

- (1) creating models and methods for the design of human development, social service, social and societal systems;
- (2) designing and developing resources for systems, design, and evolutionary learning; and
- (3) providing technical assistance in systems and design learning and systems and design applications.

#### THE INSTITUTE:

?? Fosters individual and collective research in the application of the systems, design,

- and evolutionary sciences in social and societal contexts.
- ?? Designs and develops models, approaches and methods applicable to the analysis, design, development, and management of human development, social service and social and societal systems.
- ?? Designs and develops resources and programs for systems, design, and evolutionary learning.
- ?? Organizes and supports conferences that provide opportunities for systems, design, and evolutionary research and professional development in systems, design, and evolutionary learning and applications.
- ?? Develops and publishes learning resources, conference proceedings, and monographs that are relevant to the work of the Institute, and seeks various external publication opportunities.
- ?? Seeks to establish cooperative arrangements with programs and groups in

the service of attaining the objectives described above.

The program of ISI is carried out by Institute Fellows who pursue the work of ISI:

- (1) in International and Regional Conversation events,
- (2) in their own organizations, and
- (3) in Research Teams in preparation for their Conversations.

The Institute is a self-organizing system. ISI Fellows have stewardship responsibility toward the community, toward each other, and toward those they serve. Operational functions are carried out by a management team, standing committees, a program council, a transcultural council, and an international advisory council. Resources to support the administrative, communication, and program work of ISI come from annual contributions of Institute Fellows.

Programme for the year 2000:

The current year, as usual, ISI assisted with the organization of the Fuschl Conversation and initiated and is organizing the 12th Annual International Conversation of the Asilomar Conversation Community on Social Systems Design. The Conversation is scheduled for the 3rd to the 8th of November. Research topics of the Conversation include the following:

- ?? Research Team A + D: (Joint Program)
  Designing Healthy and Authentic
  Communities, Designing Evolutionary
  Learning Communities.
- ?? Research Team B: Understanding and Designing Conditions for Transformative Group Learning.
- ?? Research Team C: "Its' a Small World Idea Book;" Designing an Eco-literacy Book that Relate Children with the World at Large.
- ?? Research Team E: "The Agora Project:" Designing New Agoras, Evolutionary Design Communities for the 21st Century.
- ?? Research Team F: Designing and Institute for Systems Design.

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Bela H. Banathy

### Korean Society for Systems Science Research

The Korean Society for Systems Science Research had the regular seminars on "systems science methodology and its applications" four times in 1999, in which the main topics are as the following:

- Paradigm Shift in Systems Science and Social Science Research (1999)
- Catastrophe Theory and the Study of Social Change(1999)
- Complex Systems Model for the Analysis of Global Crisis(2000)

The Korean Society plans to have "the International Conference" on "Complex Phenomena of the Global Crisis in the 21<sup>st</sup> Century: Diagnosis and Prescription" on May 3-4, 2001 at Seoul National University.

Prof. Yong Pil Rhee Seoul National University San 56-1 Shiin-Dong Kwanak-Gu Seoul 151-742, Korea email:rheeyp@snu.ac.kr

Yon Pil Rhee

# Polish Systems Society (PSS)

Activities in 1999:

Organization and co-organization of conferences:

The international conference "Information Systems Architecture and Technology ISAT 1999". Conference Proceedings published by the Wroclaw University of Technology and the PSS: ISAT '99 Proceedings: "{}Experimental Methods in Machine Investigations"{}.

Additionally two members of the Board of the PSS presented their dissertations for the habilitation degree.

Journal:

SYSTEMS: Journal of Transdisciplinary Systems Sciences, Volume 4, Number 1-2

Promotion of systems movement achievements:

Seminars concerning systems theory and application.

International scientific cooperation:

Resulting from the PSS activity program: participation of the PSS members in Systems Conferences.

Program for the year 2000:

most important scientific and organizational purposes of the PSS in 2000 are the following:

Organization and Co-organization of Conferences:

The international conference "Information Systems Architecture and Technology ISAT 2000".

The Transdisciplinary Conversatorium: Security and Degradation of Machines Systems Environment.

Book publications:

ISAT '2000 Proceedings.

Monographic and transdisciplinary work " Social Vision of Communication, Information and Knowledge of the 21st Century ". Prof. M. Bazewicz, President of the PSS.

Journal:

SYSTEMS Transdisciplinary Journal of Systems Sciences, Volume 5, number 1 (special issue dedicated to the new era of the 21st century) and number 2.

Promotion of systems movement achievements: Seminars concerning systems theory and application.

International scientific cooperation:

Participation of the President of PSS in the Fuschi Conversation '2000

ISSS Meeting.

Extension of the distribution of SYSTEMS Journal among the community of the IFSR Members, in collaboration with the IFSR Secretary.

### Slovenian System Research Society

Slovenian System Research Society is a small one. Not many faculties at both universities and other few schools of higher education include systems theory as a course, although some more do apply it. Interests are quite diverse. As a society, we sponsor STIQE conferences biannually (STIQE means: Systems Theory, Innovation, Entrepreneurship, Environment).

The 5th STIQE is held on June 27-30, 2000 in Maribor): Nobody is admitted to international conference unless the paper links at least two of the areas mentioned.

We also cosponsor yearly Slovenian conferences on innovation topics, acronym being PODIM, in Maribor, too.

Additionally our members cooperate in a number of informal ways, in addition.

c/o Prof. Matjaz MULEJ ISRUM, Univerza v Mariboru

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M. Mulej

# Systeemgroep Nederland

Dutch Systemsgroup (Systeemgroep Nederland or SGN)) aims to support the development of systems theory as a medium communication between scientific disciplines and between science, technology and society about processes of technological innovation and social renewal. Bi-annually a 'Problems of...' conference is organised with the support of the SGN in Amsterdam, and the Proceedings are published in the Journal of the Systemgroep Nederland 'Systemica'. The next conference, which is already the twelfth in the series, will take place in April 2001. The theme will be announced soon, so watch our website. Included in the membership package is a subscription to Systems Research and Behavioural Sciences, the IFSR journal. Further activities are mainly organised by members themselves. The language is usually

Dutch, but also depending on topics and interest of contributors. For more information

Felix Geyer (Secretary)

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Martha Vahl

# **Conference Reports: EMCDSR 2000**

EMCSR'2000 took place on April 25 - 28, 2000 at the University of Vienna and was organized by the Austrian Society for Cybernetic Studies (ÖSGK) in cooperation with Dept. of Medical Cybernetics and Artificial Intelligence, Univ. of Vienna and International Federation for Systems Research.

Since 1972, the biennial European Meetings Cybernetics and Systems Research (EMCSR) have served as a forum for discussion of converging ideas and new aspects of different scientific disciplines. As on previous occasions, a number of sessions providing wide coverage of the rapid developments will be arranged, complemented with daily plenary meetings, where eminent speakers will present latest research results. In a plenary session on Friday, April 28 Prof. M. C. Jackson and Prof. G. Chroust presented the status, the work and the aims and goals of

the IFSR.

We described the Fuschl conversations and the importance of the Systemic view.



M.C. Jackson at the EMCSR presentation

### IFSR Scholarships for EMCSR 2000

Traditionally the IFSR supports submitters of accepted papers of the EMCSR by paying for their conference fee. At the EMCSR 2000 16 participants had been selected, and we are especially proud that 7 of the were women. The following authors had been selected:

Zikrija Avdagic (Bosnia-Herzegowina): Neural Networks in Identification and Control for Slip Course-Keeping

Rainitchka Tzoneva (Bulgaria, South Africa): Optimal Control Calculation of Batch Fermentation

Magdalena Kalaidieva (Bulgaria): Design Procedures for a Data Base for Systems Sciences Petr Lansky (Czech Republic): Statistial Inference for a Simple Stochastic Model of Drug Dissolution Krisztina Szalisznyo (Hungary): Statistical Analysis of the Hippocampal Mossy-Fiber Projection's Effect

Tamas Kiss (Hungary): Hippocampal Rhytm Generation: Gamma Related Theta Frequency Resonance

Eugenia Kalisz (Romania): Achieving Cooperation of Self-Interested Agents Based on Costs and Gain Ignacy Duleba (Poland): Analytic and Optimal Solution of an Allocation Problem with Transport of Materials

Ireneusz Sierocki (Poland): A Parallel Decomposition Method for Solving the Minimum Automation Identification Problem

Radoslaw Klimek (Poland): A Method of a Systematic System Analysis Using Temporal Logic

Antoni Ligeza (Poland): Logical Analysis of Databases and Rule-Based Systems

Olga Fomichova (Russia): Realization of Thought-Producing Self as the Principal Cognitive Precondition of Successful Acquainting Children with Computers

Vladimir Pozdniakov (Russia): A Y2K Point of View on Economic and Cultural Developments in the US and Russia

Tatyana Medvedeva (Russia): The Problem of Social-Labor Relations Management: A Methodological Aspect

Natalia Fedotova (Russia): Cultural Differences in Business Relations Between Europeans and

Alexander Makarenko (Ucraine): Geometrical Approach to the Measure of Individual Object Complexity

### IFSR's Secretary/treasurer receives Honorary Membership of ÖSGK

On April 28, 2000 during the closing ceremony of the EMCSR'2000 in Vienna IFSR's Secretary/Treasurer, Prof. G. Chroust, received the Honorary Membership of the ÖSGK (Austrian Society of Cybernetics) from the hands of Prof. R. Trappl, the president of the ÖSGK. Prof. Trappl pointed out the long membership of Prof. Chroust and his services for the ÖSGK: This honour was also a recognition of IFSR's continuing support of EMCSR's activities.

In his thanks Gerhard Chroust mentioned the more than 30 years of friendship and cooperation between Prof. Trappl and himself.



Prof. R. Trappl, Prof. G. Chroust

#### EMCSR 2000 - Ross Ashby Memorial Lecture, April 26, 2000

Traditionally IFSR sponsor a Ross Ashby Memorial Lecture at the EMCSR-Conference, in honour of R. Ashby, the pioneer of cybernetics. This year the lecture was given by Prof. Dr. N. Jennings

#### Automated haggling: building artificial negotiators

Prof. Dr. Nicholas JENNINGS
University of Southampton
United Kingdom

Computer systems in which autonomous software agents negotiate with one another in order to come to mutually acceptable agreements are likely to become pervasive in the next generation of networked systems. In such systems, the agents will be required to participate in a range of negotiation scenarios

and exhibit a range of negotiation behaviours (depending on the context). To this end, this talk explores the issues involved in designing and implementing a number of automated negotiators for real-world electronic commerce applications.

# **Systems Research and Behavioral Science**

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David C. Lane

The Practice and Ethics of Design

Kenneth C. Bausch

Generic Research Designs in the Study of Education: A Systemic Typology James Steve Counelis

Quantitative Relationship between Collective Action and Prisoners' Dilemma Miklos N. Szilagyi

Complex Societal Problem Solving: A Possible Set of Methodological Criteria P.N. Murthy

#### Volume 17 Number 2

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Li D. Xu

The Contribution of Systems Science to the Development of the Decision Support System Subspecialties: An Empirical Investigation

Sean B. Eom

Integrating Systems Concepts into Manufacturing Information Systems

Lynn Ling X. Li

Systems Research, Genetic Algorithms and Information Systems

Sohail S. Chaudhry, Michael W. Varamo and Lida Xu

Concept Representation Factor Space Theory and Information Systems Research

Vincent C. Yen and Hong Xing Li

A Robust Control Method with Applications in Integrated Information Systems

Chuwang Cheng and Bingyong Tang

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Zhichang Zhu

An Integration of Systems Science Methods and Object-oriented Analysis for Determining Organizational Information Requirements

Linda Sau-Ling Lui

#### Volume 17 Number 3

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**G** Jaros

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Sushil

The whole and main ideas of systems science

J Germana

Where a blind man ends: Five comments on context, artefacts and the boundaries of the mind

Y Neuman & Z Bekerman

#### Volume 17 Number 4

Special issue on the South African Systems Conference edited by Tom Ryan

#### Volume 17 Number 5

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#### Volume 17 Number 6

Complex systems approach to the study of politics

Y Rhee

Developing a systemic model for the evaluation of conflicts

L Pinzon& G Midgley

Evaluation of patient focused health care...

S Benko & A Sarvimaki

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D L Swanson

On a wing and a prayer? Exploring the human Components of technological failure

D Smith

Why consciousness? A causal account

R Fivaz

#### **News from the Book Market**

# International Encyclopaedia of Systems & Cybernetics:

This work whose editor is Charles François appeared in 1997, but was quickly out of print.

It has been reprinted by the publisher K.G. Saur Verlag of Munich, Germany, and is again available.

email: 100730.1341@compuserve.com,

http://www.saur.de

#### **Journals**

# **European Journal of Economic and Social Systems**

The Revue Internationale de Systémique, (published by Dunod) has been discontinued, but EDP-Sciences, an other French publisher, will continue the Revue under the title of "European Journal of Economic and Social System"

The EJESS is devoted to social systems, mainly economics, management and organizational systems.

The Journal will be published in English and its editorial board will be international (mainly European). We are beginning this new period of the journal with an intentionally restricted board whose aim is to ensure the cohesiveness of the project. However, we

already plan some enlargements in a near future. The editors invite the submission of papers, critical survey, and review articles. More information:

http://www.edpsciences.com/docinfos/EJESS/.

There is an online edition of the Journal for registered subscribers. Tables of content and abstracts are available in HTML format and accessible to everybody.

Further information:

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http://www.edpsciences.com/docinfos/EJESS/

# 100th Anniversary of Ludwig von Bertalanffy's Birthday

Ludwig von Bertalanffy was born on Sept 19, 1901 and educated in Vienna.

From his very significant contributions, one deserves to be appreciated particularly. It is the main outcome of his humanitarian explorations in the living world during the difficult time that he worked in Vienna and consolidated later during his tireless struggle against the behaviourism, the reductionism, the robotomorphism, the zoomorphism, the scientism,... These explorations led him to "envision the basis of a General Systems Teaching (Allgemeine Systemlehre)" which became "an approach to the full spectrum of human problems": the General Systems Theory. It can even be considered an ideological tool - that nowadays we must develop continuously for finding out how could the Systems Movement contribute better to deal with the serious problems that face humankind at present.

From his personal performance, as one of the first and still foremost thinkers, it has become urgently indispensable to examine how we must develop his proposals about the need to envision the perspective for humankind through humanitarian co-operation of individuals learning to perform accordingly, under the influence of collectives.

From his conceptual achievements it is indispensable for the systems people to recognize the potentiality of "the open system" that he started to develop for finding out how interactive relationships may maintain dynamically in operation all kinds of wholes (systems) which are waiting the arrival of researchers, who should discover the laws of organization that govern the functioning of them: the systems

For the celebration of the 100th Anniversary of Karl Ludwig von Bertalanffy's Birthday (Sept 19, 1901) the Bertalanffy's Year for the Systems Community will start with the systems scientists invitation to and organizations to visit the Web Site (http://bertalanffy.iguw.tuwien.ac.at/) which also comprises an invitation to attend the Preliminary Meeting on 19 September, 2000 (10:00 -17:00, Böckl-Saal, University of

The new IECD Everything Committee

Technology of Vienna, Karlsplatz 13, A-1040 Vienna, Austria).

Organizing Committee: Karl S. Althaler, Elohimjl, Hardy Hanappi, Wolfgang Hofkirchner, Bert Klauninger, Markus Rajtora Information about participation:

Markus Rajtora (<a href="mailto:instinct.productions@magnet.at">instinct.productions@magnet.at</a>) and Elohimjl (elohimjl@mail.zserv.tuwien.ac.at)

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