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IFSR ELECTS A NEW EXECUTIVE COMMITTEE!

In its Board Meeting on April 15, 1998, the IFSR members elected a new Executive Board: Prof. Michael C Jackson, Prof. Yon Pil Rhee and Prof. Gerhard Chroust.

Dear Readers!

This Newsletter is somewhat out of the usual. We actually have only two topics: the election of the new officers of the IFSR and the reports on the Fuschl Conversation 1998. I hope that you will enjoy it! Sincerely

Gerhard Chroust

Prof. Michael C. Jackson Prof. Yon Pil Rhee Prof. Gerhard Chroust. President Vice-President Secretary/Treasurer Image: Secretary Secretar

Prof. Michael C Jackson:

I was delighted to be elected the new President of the IFSR, at the Vienna meeting, to serve from 1998-2000. It was particularly pleasing because there were so many representatives from member societies present at the election meeting and I, the Vice President, Professor Yong Pil Rhee, and Secretary/Treasurer, Professor Gerhard Chroust, received such overwhelming support.

During the next 2 years, I will be trying as hard as I can to continue the excellent work of my predecessor Bela Banathy, in order to make the IFSR a living and vibrant organisation which provides essential services to its member organisations. To this end I shall be seeking to

Prof. Yon Pil Rhee:

We are living in a rapidly changing world. We find ourselves in a state of profound, world-wide crisis, it is a complex, multidimensional crisis the facts of which touch every aspect of our life. It is set up an active network of member societies. The Vice President, Professor Rhee, will be seeking to set up international high profile projects which can bring together members of different national societies. Other plans for the Newsletter and journal will be communicated in due course.

I guarantee my best efforts in the service of IFSR and look forward to hearing from you with your ideas about how we can go forward together.

Prof. Michael C. Jackson Lincoln University Campus Brayford Pool, Lincoln LN6 7TW Tel: +44 1522 886165, fax:+44 1522 886032 email: dgibbs@lincoln.ac.uk

a crisis of intellectual, moral, and spiritual dimensions. It is a striking sign of our time that people who are supposed to be experts in various fields can no longer deal with the urgent problems that have arisen in their areas of expertise. The current crisis, therefore, is not just a crisis of individuals, governments, or social institutions, it is a transition of planetary dimensions.

The primary role of IFSR is not only to provide a forum for communications among the members from various disciplines, but to also facilitate a continuing project on global crisis. I feel that it is necessary to establish "the Research Committee" within IFSR in order to cope with the

Prof. Gerhard Chroust

I would like to thank all member societies for their vote of confidence. I see my role in looking after the (unfortunately low) budget of the IFSR and managing the infrastructure, maintaining the contact to members. Some of these tasks will be taken over by the new president. A third task is the quarterly Newsletter. It is YOUR Newsletter, so supply information, reports, data etc.

Having been a member of the Executive Committee for the past 6 years I can see a constant, healthy growth in the dynamics of the Global Crisis in the 21st Century. It is also very urgent to adopt and declare "the Manifesto of Systems Thinking for Solving the Global Crisis in the 21st Century". I think that all of members of IFSR will want to take part in this meaningful project.

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

IFSR. So please contribute to that by sharing your experience and your knowledge with the rest of the systems society.

Prof. Gerhard Chroust Kepler Universität Linz Altenbergerstr. 69, 4040 LINZ, Austria tel; +43-732-2468-866, fax: +43-732-2468-878 email: GC@ SEA.UNI-LINZ.AC.AT

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When I return home – I am a different person!

REPORT ON THE FUSCHL CONVERSATON 1998

What is Fuschl?

First of all Fuschl is a charming, romantic little village on a little lake in lovely Salzkammergut, near Salzburg, Austria, surrounded by mountains.



picture: Julie Dyer

More pictures can be found in: http://www.sea.uni-linz.ac.at/ifsr/activities/fuschl_98/pictures/

What has made the term Fuschl worldwide known, are the Fuschl Conversations. What is a conversation? Conversation is

- A collectively guided disciplined inquiry
- An exploration of issues of social/societal significance

- Engaged by scholarly practitioners in selforganized teams
- who select a theme for their conversation
- which is Initiated in the course of a preparation phase that leads to an intensive learning phase

THE EVOLUTION OF A CONVERSATION PROGRAM

In the late seventies, a group of us in the international systems science community became increasingly disillusioned with the practice of traditionals scientific meetings where papers are presented (often read) but rarely discussedin depth. But occasionally, creative conversations happened away from scheduled sessions. Whenever we had those rare occasions, we always had a high level of learning and satisfation. So we decided "to make the rare the norm" in our meetings. We created an opportunity for teh "rare" when we organized a oneweek conversation in 1982 at Fuschl Lake in Austria. Arranged into the groups, we asked teh question. How can we use the insights gained from systems science for the improvement of the human condition? By the end of the week our conversation groups came up with some 80 action items, which we clustered and designated as an agenda for our international coversation program. By now we have had over 21 conversations in seven different countries. For quite a while, these conversations were the strategic dialogue type. During the last few years, however, we became aware of how an up-fron, generative type of dialogue could enhance the potential of our

conversations. In fact, in the course of teh last three conversations some of our groups focused on the design of such generative and strategic conversations.

KEY MARKERS OF MEANINGFUL CONVERSATIONS

- the conversation Conduct as an ongoing sustained process, governed by jointly established rules
- Agree on who will participate
- Agree on and clearly define the topic and the triggering questions
- Decide jointly the method used
- Ensure equity in participation and accept all contributions without criticism
- Aim at defining a common ground and attaining consensus
- Prepare well for the conversation, ground it in rich knowledge base that participants bring to the event, and have knowledge resources at hand
- Report findings and continue the conversation by networking, by mail and electronic communication

- Define and apply the findings of our work:
 - (A) Individually in our back-home community and
 - (B) collectively in joint projects of developing learning resources, research reports and publications.
- Always share findings and outcomes with community

Gordon C. Dyers Closing Words

"You may ask - as we have asked ourselves what can a small group like ours do? We do not - and never will have - the illusion of "grandeur". We know very well that our voice is a small voice but it will be persistent and spoken in many languages as the years go by. We are guided by an evolutionary vision of the global unity of mankind and the full development of human potential everywhere and we dedicate ourselves to work on the agenda we developed in the course of our meeting. We are inspired by a shared dream of a better world for all."

Evolutionary Learning Communities

Alexander Laszlo

Bence Nanay

Sue McCormick

Charles François

Kathia Laszlo



The focus of the line of inquiry was the exploration of Evolutionary Learning Communities (ELC). By the end of the first day we were able to articulate our learning agenda for the week. The agenda consisted of three types of discussion questions:

- Descriptive. To explore the qualities, resp. characteristics of four different types of communities (as defined below) in terms of the twelve concepts/characteristics we have identified (and whatever others emerge in the process).
- 2. Process. To consider how to create the conditions to move or facilitate moving from one type of community toward the ELC type.
- 3. Interpreting/Translating. To create the narratives, metaphors, histories that communicate the meaning of the above two

aspects of the model in ways that are empathetically significant to others.

At the first level, the descriptive level, we distinguished four types of communities from the viewpoint of twelve key systemic concepts/qualities/characteristics:

- The Traditional Community (TC): A closed, stable system where the individual's identity is determined by a collective identity rooted in transmitted myths, values, norms, and rites.
- The Surrogate Community (SC): A closed, unstable system artificially created to attract and satisfy disenfranchised individuals yearning for community through imposed norms and values.
- The Learning Community (LC): An open dynamic system in which proactive and reactive individuals collectively adapt *to* their environment.
- The Evolutionary Learning Community (ELC): An emergent open system demonstrating dynamic stability by adapting *with* its environment and generating sustainable evolutionary pathways.

We identified twelve key systemic concepts/qualities/characteristics as follows: 1. authentic

- 2. community
- 3. learning
- 4. evolution/co-evolution and evolutionary
- 5. sustainable and sustainability
- 6. challenge
- 7. syntony
- 8. design
- 9. culture
- 10. identity
- 11. consciousness
- 12. purpose

These concepts/qualities/characteristics, in combination with the four types of communities, allowed us to fill the following Interpretive Matrix:

	IC	SC	LC	ELC
1. syntony				
2. purpose				
3. identity				
4. authenticity				
5. design				
6. culture				
7. challenge				

At the second level of our working agenda, the process level, we found that it was difficult to engage in guestions of the movement from TC toward ELC without getting right into the third level, the interpreting/translating level that dealt with how to communicate initiatives to facilitate the movement. We also found that we were drawn to discussion of how to actually facilitate the movement toward the ELC, but realized that could/should not work in this way because it would be tantamount to designing for others. If we focused on facilitating the emergence of ELCs directly, we would end in co-creating an ELC that in effect would be an SC. So, the best we could do would be to facilitate the co-creation of the conditions that would invite the emergence of ELCs.

General Principles underlying the Design of Cognitive Models

Arne Collen, Eliano Pessa, Nicholas Paritsis M.P. Penna



The general plan of the investigation was:

- Introduction
 - The need for cognitive models in a number of different domains (psychology, psychiatry, humancomputer interactions, organizations, etc.)
 - The need for general principles underlying the design of cognitive models
- Problems of definition
 - Different definitions of knowledge
 - · Problems with different approaches
 - Need for considering the different approaches as complementary rather than opposite
- General Principles
 - The models should be presented in a wider context

- The model could be improved by considering higher and lower levels of system organization, by taking are of the interfaces between levels, so as to constrain the model.
- Attempt is to be made to relate microscopic and macroscopic aspects of model in clear way. (hybrid models)
- Clarify the relationships between traditional informational content (amount) and knowledge content of the model
- Consider the relationships between cognitive functions taken consideration and non-cognitive aspects, such effects, emotions, etc.
- Use of interdisciplinary and transdisciplinary approach which can be related to social and psychological approaches
- Use as much as possible systems concepts and language
- Find isomorphisms between informationprocessing systems and other living, and artificial, organizational systems
- Consider the purpose of the model in order to decide the contents and the tools of modeling (e.g, see Jackson's classification)
- Try to find a description as economic as possible

- mainly those involved in circular causality processes
- quote the technical methods to eliminate variables in loops
- Examples of cognitive models which could become frameworks for cognitive modeling
- Model by Paritsis
- Model by Anderson (ACT)
- Artificial life Model
- Relation to general principles

- Use as few variables as possible (only the most important ones) to explain and represent the complexity of the cognitive processes.
- Pay attention to circular causal loops that have to be preserved in the model because they usually play an important role.

Creating a Purposeful Virtual Community

Olov Forsgren Lars Albinson Magdaleva Kalaidjieva Elohim Jimenez



Based on the spirit of Fuschl Conversation, we have noticed that is might be convenient from now on to involve other people in our discussion as we intend to tackle one or another of the very difficult and complex problems that mankind is facing at present. An involvement of that kind may be implemented through the constitution of an information system as an indispensable tool for organizing systemic actions aiming at improving the human conditions here or there.

This information system ought to allow us to cope with conflicting situations arising from the different views that the potential stakeholders may create when interpreting the actual G.A.Swanson Yon Pil Rhee Mike Bazewics

circumstances and their visions about the way such circumstances may evolve in the future.

In our conception of an information system we consider that the stakeholders should constitute a Purposeful Virtual Community (PVC) willing to sustain conversations and learn how to deal with every aspect of the problems chosen for being tackled. Any of these aspects would be considered a topic.

Any topic to be dealt with should be determined by the members of the PVC.

Knowing that the members of the PVC will not be physically present we must find ways for assuring that the debate is relevant and that new members may be accepted without too many disturbances. We must also take care of situations generated when critical decisions are made or deadlines ought to be exerted.

The proper handling of ethical, ecological criteria must support our system and its manifestation must be determined and improved by the PVC.

How to implement the design and development of the system were discussed. It is possible to build the system within a private organization. The success would provide the basis for extending its use to the community level by obtaining funding through public grant, which will facilitate introduction at societal level.

Designing Integrated Community Service Systems			
Ken Udas kenudas@acm.org Manfred Beneder mb@sea.uni-linz.ac.at Mathew James mjames@lincoln.ac.uk	Irene Paritsis paritsis@ilios.med.uch.gr Steven Stromp steven.stromp@internet.sk		



The group approached the trigger question by first exploring related issues such as the meanings and concepts of community, development, and design. A distinction between micro- and macro-community was developed that is consistent with the traditional notions of system, and supra-system. In addition, six characteristics of community were identified. These may be used in evaluating the nature of, need for and application of community development. These characteristics ar e

- 1) identity, of both individual community members and the community itself,
- 2) stages in community evolution e.g., forming storming and norming,

- 3) roles adopted by community members,
- 4) a notion of geography, or "closeness",
- 5) support, of individuals by the group, commonality of experience, and
- 6) exchange between the micro and macro community (ies).

Finally, the group also suggested a process for community development. For this, a set of guiding, but not imposing, principles was developed. This iterative process comprises four stages,

- 1) identification of stakeholders and definition of the macro-community,
- 2) dialog between macro and microcommunities,
- 3) identification of development / development need,
- 4) operationalize development.

To support this model for development al design, a model for the measurement of the maturity of the development process was constructed in order to ensure continuous quality improvement. This maturity model is applicable to any kind of development process as well as to any size of community.

Future Learning Agenda for Life Long Learning

Gordon Dyer (UK) Sylvia Brown (UK) Gerhard Chroust (Austria) Yoshi Horicuhi (Japan)



Gary Metcalf (USA) Moonhi Rhee (Korea) Gordon Rowland (USA) Cecilia Tagliaferri (Italy)

> The participants came from three different continents - Asia, Europe and North America. The initial discussions provided a fascinating exploration of eastern and western philosophy and the various national cultures, and thus what currently influences learning systems. Because we believed that change of culture to support learning for systems design could only be achieved via "experience" this lead us to an initial trigger of "how to create experiences of cocreation throughout life". The ensuing discussion focussed around a tentative model for "creation of value(s)" which we saw as an appropriate theme to drive a life-long learning agenda. This is represented in the matrix below:

	How to create conditions	What leads to the conditions	Why are we doing this?
Individual level	Personal Development (Designerly Living)	Personal Mastery	Creation of Value(s)
Community Level	Communication/Dialogue (Evolutionary Learning Community)	Shared Vision	Harmony
Societal Level	(Evolutionary Guidance System?)	Concern for all current and future generations	Sustainable Development

To illustrate - under the heading of "why?" creation of (appropriate) value at individual level should ideally lead to harmony at community and sustainable development at societal level. The model is at an early stage of development with much to be explored within the cells of the matrix and their inter-relationships. We recognized that in order to bring about the kind of transformation to current learning agendas (which in the developed world are largely driven by the economic imperative) to a learning agenda of this kind, will probably also require the development of a "transcendence guidance system". Exploration of this provisional model will continue as a discussion theme for the team. Footnote:

Gerhard Chroust, Secretary of IFSR, and member of the group commented that there was an interesting parallel in this work to the current thinking in software engineering. The underlying objective is to assure the quality of the software to be delivered. It turns out we cannot directly evaluate the software product (neither afterwards nor beforehand). Currently the only way to approach this is to evaluate the capability of the delivery organization by evaluating the process used to develop the software product. And so it may be with evaluating levels of achievement of a life long learning agenda to these types of criteria.

NEWS FROM THE BOOK MARKET

CASYS'97,

1ST INTERNAT. CONFERENCE ON COMPUTING ANTICIPATORY SYSTEMS (August, 11-15, 1997) Collection of Abstracts Daniel M. Dubois, (ed.) 400 pages.

published by CHAOS asbl. University of Liege, Institute of Mathematics, Grande Traverse 12, B-4000 LIEGE, Belgium Fax.: +32 4 366 94 89 Daniel.Dubois@ulg.ac.be

INTERNATIONAL ENCYCLOPEDIA OF SYSTEMS AND CYBERNETICS

Charles François (editor)

The International Encyclopedia of Systems and cybernetics presents, for the first time, a complete overview of the field of systems and cybernetics and its development from its beginnings more than forty years ago up to the present.

More details about this highly interesting book can be found in Newsletter 17/1 (March 1998) systemic topics.



K.G.Saur München, 1997, 423 pages. hardbound. DM 398.00, ISBN 3-598-11357-9

Title			Date and Place	Further Information
Abbreviations: CfP, CfA: Call f.Papers/Abstract, FP: Final Paper due, <no. nn="">: more details in issue.nn</no.>			er due, <no. nn="">: more details in issue.nn</no.>	
CASYS'98: 2 ⁿ Computing Antici	^d Int. Conf. patory Sstems	on	August 10-14, 1998 Liege, Belgium	asbl CHAOS, Dr. Ir Daniel M. Dubois, Inst. de Mathematique, Univ. de Liege, Grande Traverse, B-4000 LIEGE 1,tel. +32 4 366- 9496, fax: -9489, Daniel.Dubois@ulg.ac.be, http://www.ulg.ac.be/mathgen/CHAOS/CASYS.html
15 th Congress Cybernetique	International	de	August 24-28, 1998 Namur (Belgium),	Cyb@info.fundp.ac.be

CALENDAR OF EVENTS

ICSSSE'98. The 3rd International	August 25-28, 1998	Prof. Jian Chen, School of Economics and
Conference on Systems Science	Beijing PRC	Management, Tsinghua University, 100084,
and Systems Engineering	Deijirig. I ICC	Beijing China, Fax: (8610)62785876;
		Tel: (8610)62785536; (8610)62770331; :
		jchen@mail.tsinghua.edu.cn
EUROMICRO'98: Enginering Systems	Aug. 25-27, 1998,	F. Tirado, Dept,. de Informatica y Automatica,
and Software for the next decade	Vasteras, S	Universidad Complutense, 28040 Madrid, Spain
		1ei +54-1-5944576, lax. +54-1-5944667,
IFIP'98: 15 th IFIP World Computer	Aug. 31- Sept 4, 1998	Austrian Computer Society, Wollzeile 1-3, A-1010
Congress:	Vienna/Budapest	Vienna, tel: +43 1 512 02 35-0, fax: -9
'The global Information Society'		ifip98@ocg.or.at
<no. 16="" 2=""></no.>		John v. Neumann Computer Soc., Bahtori u. 16,
		H-1054 Budapest, tel: +36 1 13 -293 49,
	1-1 September 1008	Hilary Johnson Laurence Nigay and Chris Roast
	Sheffield, UK	HCI'98. School of Computing and Management
		Sciences, Sheffield Hallam Univ., Sheffield S1
		1WB,
5 th European School of Systems	Sept 7-11, 1998	Eric Schwarz, C. interfac. d'etudes systemique,
Science	Neuchatel, CH	U.de Neuchatel, Faubourgde L'Hospital 106, CH -
		2000, Neuchatel, CH, tel: +41 32 718 1190,
		http://www.upipe.ch/CIESYS/ECOLE.html
13 th Int. Conference on Systems	Sept. 15-18, 1998	Adam Grzech, Wrocław University of Technology
Science	Wroclaw, PL	Institute Of Control And Systems Engineering,
<no. 16="" 3=""></no.>	CfA: Jan. 31, 1998	Wybrzeze Wyspianskiego 27, 50-370 Wroclaw,
	FP: May 31, 1998:	Poland, tel: +48-71-320-33-28, fax +48-71-320-
		3884, icss@ists.pwr.sroc.pl,
2 nd Int. Conf. on Evoluable Systems:	Sopt 22 26 1009	http://www.ists.pwr.wroc.pi/13icsss/
From Biology to Hardware (ICES 98)	Lausanne CH	Technology CH 1015 Lausanne CH
	CfP: March 1, 1998	Tel.: +41-21-693-2652, fax : +41-21-6933705,
	FP: June 1, 1998	Andres.Peez@di.epfl.ch-
ISAT'98, 20 th Int. Scientific School on	Oct. 15-17, 1998	Prof. A. Grzech, Inst. of Control and
Information Systems Architecture and	Szklarska Poreba,PL	SystemsEng., Wroclaw Univ.of Techn.,
lechnology		Wybrzeze Wyspianskiego 27, 50-370 Wrocław,
		http://www.ists.pwr.wroc.pl
IDIMT'98. 6 th Interdisciplinary	Oct. 21-23, 1998	Gerhard Chroust, Systemtechnik, Kepler
Information Management Talks	Zadov, Czech Republic	Universität Linz, 4040 Linz,
-	CfP: April 1998	tel: +43-732-2468-866, fax -878
	FP: July 1998	GC@SEA.uni-linz.ac.at
2nd International Conference on:	Oct. 26-28, 1998	Prof. N.E.Mastorakis, Hellenic Naval Academy,
	CfP: March 26, 1998	mastor@softlab.ntua.gr Eav: (+301) 7775660
	011 - 111011 - 20, 1000	http://www.softlab.ece.ntua.gr/~mastor
1998 Frontiers in Education	Nov. 4-7, 1998	(www.eas.asu.edu/~asufc/conference/fiehmpg,ht
<no. 16="" 4=""></no.>	Tempe, Arizona, USA	m) or mail to fie98@asu.edu.
Cybernetics and Ecology	Nov. 7-10, 1998	Cybernetics Academy "Stefan Odobleja" - Dragan
<no. 16="" 3=""></no.>	Palma de Mallorca, E	European Foundation, 153 Calea Rahovei, sector
	CTP Jan. 1, 1998	5, Bucharest, Romania Tol: (401) 335 37 10, fax: (401) 336 07 70
17 th Internat, Conf. on Conceptional	Nov. 16-19, 1998	Tok Wang LING, Dept. of Information Sciences &
Modeling (ER'98)	Singapure	Computer Sciences, National University of
	CfA: March 27, 1198	Singapore, Lower Kent Ridge Road, Singapore
	FP: July 17, 1998	119260, lingtw@iscsnus.edu.sg, fax: (65)
		779-2734
STIQE'98: Linking Systems Thinking,	Maribor, Slovenia,	Prot. dr. Miroslav Rebernik or Prof. dr. Matjaž
and Environment	December 7 - 9, 1998	and Business PO Box 142 (EPE) 2000
		MARIBOR, SL, Tel.: + 386 62 22 900. Fax: +
		386 62 26 681 , MULEJ@UNI-MB.SI

Synergy Matters: With Systems in the 21 st Century: 6 th International Conf. of the United Kingdom Systems Society	July 5-9, 1999	Doreen Gibbs, Lincoln School of Management, University of Lincolnshire and Humberside, Lincoln LN6 7Ts, UK Tel. +44 1522 886202, fax +44 1522 886023, Dgibbs@lincoln.ac.uk
CES-4: Fourth Systems Science European Congress	Valencia – Ibiza Sept. 20-24, 1999	Sociedad Española de Sistemas Generales Escuela de Investigacion Operativa, Av. Blasco Ibañez, 13, 46100 Valencia. Spain tel: 34-96-3864269, fax: 34-96-3864268, Lorenzo.Ferrer@uv.es <u>http://www.uv.es/-pla/SESGE/</u>