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Dear Readers!

This time I would like to draw your attention to the invitation to participate in the Fuschl Conversation 1998. You also find the results of the IFSR's strategy meeting are included, thanks to the compilation done by Arne Collen and Michael Jackson.

Again I also have to start an Editor's Lament: Please send material, especially short articles for 'New Trends' and 'Conference Reports'. You can put your information directly onto our FTP-server. <ftp.sea.uni-linz.ac.at>, using directory 'INCOMING\IFSR-IN'. But inform me via e-mail about it.

I would like to remind you that the most recent IFSR-Newsletters are available at our FTP-server and can be downloaded from there: you find it in directory 'pub \IFSR'.

yours sincerely

Gerhard Chroust
Systemtechnik und Automation
Johannes Kepler University Linz, 4040 Linz, Austria

IFSR AT THE ISSS

This year's ISSS meeting took place in Budapest on Sept. 17 to 20, 1996. On that occasion Dr. Harald Linstone handed over the office of the President of the ISSS to Prof. Yong Pil Rhee, president of the Korean Society for Systems Science Research. Prof. Rhee will host the next ISSS Conference in Korea.



Dr. H. Linstone and Prof. Yon Pil Rhee

FUSCHL CONVERSATION 1998

Members of the Systems Societies of IFSR are invited to participate in the 1998 Fuschl Conversation of the Federation, scheduled Sunday, April 19 (evening) to Friday, April 24 (noon) 1998 at the Hotel Seewinkel at Fuschl am See, Austria (20 km from Salzburg).

The Conversation is organized in research teams, working on the following topics:

- The Future Agenda of Life long Learning

Initial triggering question: What is our vision of and what is our design of systems of learning and human development which focus on living a creative life and perform life long learning?

- Designing Sustainable Co-evolutionary Learning Communities

Initial triggering questions: What learning systems would create sustainable co-evolutionary learning communities? How can we design such systems?

- The Design of Collaborative/Integrated Community Service Systems

Initial triggering question: What kind of system has to be designed and operating in order to integrate and support human development and social service systems and enrich the quality of life of individuals, families and our communities.

- The Systemic Design of Information Systems

Initial triggering questions: Is information science ready for the information age? What are the guiding principles for the design of societal information systems.

The description of the topics and the composition of Research Teams will be announced April 1997. The work of the teams is accomplished in three phases:

PHASE ONE: PREPARATION.

(1) participants explore their selected topic and prepare a "think paper" that: (a) specifies their interest and previous work on the topic, (b) states their key ideas about the topic, (c) identifies topic relevant knowledge sources.

(2) Participants mail their papers (with attachments) to members of their research team by the end of October.

(3) The team coordinator, who is identified in the Spring 1987 memorandum, develops a first draft of the "theme," based on a synthesis of the "think papers."

(4) The coordinator mails out the draft to team members by the end of 1997, asking for comments and modifications.

(5) Team members return their comments to the coordinator by the end of January 1997.

(6) The coordinator develops a second draft, which is again mailed out to team members.

(7) Participants are asked to take advantage of the preparation phase and explore relevant knowledge bases and come to the Conversation with a rich set of core ideas.

The success of the program greatly depends upon appropriate preparation as well as on the generation of a substantial knowledge base.

PHASE TWO: THE CONVERSATION (in Fuschl).

At the onset of the Conversation the teams review their agenda and develop triggering questions that guide the Conversation. At the end of each day, research teams report on their progress. On Friday the teams present their comprehensive findings. The same time, we collect from participants a first draft of their evaluation.

PHASE THREE: FOLLOW-UP.

Three tasks are scheduled:

(1) Develop the proceedings of the Conversation, which presents the final report of the research teams. This report is a collective product of the teams.

(2) Submit individual scholarly papers prepared by participants based on their work on their topic. The papers will be published as a compendium or as edited issues of Systems Research and possibly Systems Practice.

(3) Participants submit their final evaluation and recommendation reports.

Authors of accepted input papers will be invited to this Conversation. IFSR sponsors the attendance at the Conversation. Spouses are invited at their own cost.

For details and suggestions of other topics contact Bela H. Banathy before Feb. 1997: Bela H. Banathy 25781 Morse Drive, Carmel, CA 93923 USA. E-mail: bhbanathy@aol.com

NEW TRENDS

SYSTEMS DESIGN AND THE FUTURE SEARCH CONFERENCE

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The Future Search conference, developed by Marvin Weisbord and Sandra Janoff, is a large group planning tool for organizational and community-based change. Banathy (1996) recognizes the Future Search strategy as an effective front end approach for a comprehensive systems design process (1996). In a recent paper Tim Waters and I identified the Future Search conference as one of five strategies for developing design capacity and readiness for change in educational learning communities (1996).

Weisbord and Janoff (1995) respectfully acknowledge many other conference processes that "overlap" the Future Search process. Emery and Trist's Search Conference model is noted as having contributed significantly to the Future

Search methodology. The authors cite Bohm's Dialogue Group, Owen's Open Space Technology and the participative strategic planning conference of Dannemiller and Jacobs as related processes that share characteristics with the Future Search, yet serve unique functions in large-scale organizational and community change efforts, depending on the goals, values and capabilities of the system. I concur with Weisbord and Janoff, but would hasten to point out there does seem to be an appropriate and comfortable "fit" between the Future Search strategy and systems design.



A Future Search conference lasts 16 to 20 hours spread over a 3-day period. During the conference, 64 stakeholders representing a diagonal slice of the diverse perspectives in the "whole system" work through a series of self-managed, purposefully structured tasks focused on experiential learning and discovery. These tasks engage the whole person, "head, hands and heart", challenging and supporting people as they

- explore their system's history and capture its wisdom;
- integrate and synergize their diverse ideas;
- expand their individual and collective perception of the current reality in terms of impacting trends and issues;
- develop a "mind map" depicting their collective view of the environment;
- own (with "prouds" and "sorries") an appropriate piece of the reality;
- create a "living" image or scenario of a preferred future;
- develop shared meaning;
- discover their common ground;
- identify activities that build on their common ground and can be implemented immediately;
- generate planning strategies to begin moving the system toward its desired future state; and
- release the human spirit and energy for productive action.

Comprehensive documentation of the conference is necessary in order to capture the data as well as dynamics (ideas, insights, feelings, expressions of participants) in text, on audio and/or video taped recordings. The information is a critical resource which is used in successive phases of design and planning.

Although each of the activities listed above contributes essential information and energy to the Future Search process, I want to draw attention to two sets of tasks I consider particularly significant at the genesis phase of systems design: developing the collective "mind-map" of the existing system and "owning" it.

The experience of producing the complex, messy mind-map that captures an expanded perceptual view of the system's reality is one which results in a powerful "aha" for most conference participants. This perception-expanding experience results in psychological and emotional dissonance. It often causes people to feel unsettled and uncomfortable, evoking a response of wanting to turn away. Yet research on learning in the cognitive and neural sciences suggests that the experience of dissonance, or disequilibrium, is essential in authentic learning, that the disintegration of old psychological constructs and mental frameworks precedes the integrative process of constructing new meaning and imposing a higher level of ordering (Piaget et.al in Caine and Caine, 1994). Dissonance and disequilibrium generated by producing the "mind-map" of the whole system seem instrumental in initiating the "leaping-out" or transcending process which Banathy (1996) suggests is essential for envisioning and designing a fundamentally different system.

The set of tasks that support people in "owning", or taking responsibility for the complexity, messiness and dissonance are likewise critical. Moving toward and owning the mind-map begins right after the map is created. People are asked to identify what they consider the most important and impactful trends as they relate to the topic and goals of the conference. The significant trends are marked (usually with some kind of sticky-dots) and then the whole group openly discusses what they see and feel.

The next morning people take a closer, deeper look at the map, analyzing it for trends that have the most dots, in other words, the trends identified by the most stakeholders as critically important. This analysis is done as a whole group. Next, in small groups, the owning process continues as people share what they are currently doing to deal with the mess and what they would do if they could. Then, groups discuss and express publicly both their "prouds" and "sorries" related to what they are doing right now to impact the topic of the conference.

The experience of taking responsibility for what is and isn't happening seems to have three important psychological and emotional results. First, disclosing "sorries" helps people unload regrets and surface fears about the existing system and the part they have or haven't had in it. Unloading relieves nonproductive tension, disentangles thoughts and feelings, increases awareness and understanding of diverse perspectives. Second, expressing "prouds" allows people to identify and clarify what is highly valued and worth carrying forward into the future. Third, the experience of listening and learning while all stakeholder groups share their prouds

and sorries develops respect and trust. Coherence and unity are strengthened.

In her work with systems design, Frantz notes an "anxiety barrier" that needs to be penetrated during design genesis (Frantz in Reigeluth et al., 1993). The experience of creating the mind-map brings to a visible level many underlying, anxiety-producing phenomena in the system. Collaboratively facing, taking responsibility for and owning these conditions are essential experiences in penetrating the barrier. People

Banathy, B. (1996). *Designing social systems in a changing world*. London: Plenum Publishing.

Caine, G. & R.N. Caine. (1994). *Making connections: Teaching and the human brain*. Menlo Park, CA: Addison-Wesley.

McCormick, S. & T. Waters. (1996). *Preparing educational learning communities for change by design*. In Trapp, R. (ed.) *Cybernetics and systems: Proceedings of the thirteenth european meeting on cybernetics and systems research*. Vol. 1; 434-439. Vienna, Austria: Austrian Society for Cybernetic Studies.

Reigeluth C., Banathy, B.H. and J. Olson. Eds. (1993). *Comprehensive systems design : A new educational technology*. New York: NATO ASI Series F. Vol. ARW.

are now ready to move forward into the next set of learning tasks: creating ideal future scenarios, discovering common ground, and planning for action that will begin to bring about the desired changes in the system.

I welcome the opportunity to share more details of the Future Search method as well as personal experiences using the Future Search conference as a design tool in the genesis phase of a long-term, comprehensive school community change effort here in Washington state. Please feel free to contact me!

Weisbord, M. & Janoff, S. (1995). *Future Search: An action guide to finding common ground in organizations and communities*. San Francisco: Berrett-Koehler.

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CONFERENCE REPORTS

Norbert Wiener Memorial Gold Medal for Professor Heinz von Foerster

The World Organization of Systems and Cybernetics (WOSC) presented the Norbert Wiener Memorial Gold Medal to Professor Heinz von Foerster at the 1995 meeting of the American Society for Cybernetics on 19 May 1995. The meeting at the University of Illinois was devoted to "Cybernetics and Circularity" and centered on the work of Heinz von Foerster.

Prof. Stafford Beer (president of WOSC) told the story of Heinz von Foerster's medal. Robert Vallée, director-general of WOSC, held the following laudation:

The scientific activity of Heinz von Foerster started with his contacts with the Vienna circle and developed later as secretary of the Macy's Conferences on cybernetics. It continued with the foundation and direction of the Biological Computer Laboratory of the University Illinois at Urbana and resulted in outstanding contributions to self-organization and noise, neurocybernetics, time and memory and cognition. In this last domain Heinz von Foerster introduced "second order cybernetics" where emphasis is put on the role of the observer and recursive processes, giving rise to a constructivism which is still a source of inspiration and makes him one of the great founders and contributors in the fields of both cybernetics and systems.

CONFERENCE ANNOUNCEMENTS

For contacts and information see Calendar of Events

ISSS-Conference 1997

Systems Thinking, Globalization of Knowledge, and Communitarian Ethics

July 22-25, 1997
Seoul, Korea

1. Application of Systems to Development of Social Science Research

- 1) Epistemology of Natural Sciences and Scientific Analysis of Social Phenomena
- 2) Methodological Bridge between Systems Sciences and Social Science Research
- 3) Dynamic Model for the Analysis of Social System

2. Recent Development of Systems Sciences and Applied Research

- 1) Chaos, Order, Non-equilibrium Thermodynamics and Complex System
- 2) Self-Organizing System and Complex Biological, Physical and Evolutionary Theory
- 3) Self-Organizing System and Macro-Micro Theory of Social/Biological System
- 4) Entropy as Evolution and Historical Development

3. Systems Sciences and Prediction of Technological Society in 21st Century

- 1) Development of Industrial Technology and Globalization of Systems Sciences
- 2) Innovation in Information Technology and Structural Change of Economic System
- 3) Development of Information Technology and Structural Change in Society
- 4) The Long Term Prediction of Structural Change in Information Society
- 5) Transformation Mechanism of Industrial Organization in Information Society
- 6) The Impacts of Information Technology on Korean Economy and Social Structure

4. Globalization of Systems Science Knowledge

- 1) Development of Educational System and Innovative Designing in Information Society
- 2) Systematic Linkage between Educational System and Curriculum
- 3) Systematic Utilization of Research Information in Systems Sciences and System Designing for Global Cooperation
- 4) Diffusion of Systems Knowledge, and Micro-electronic networks among Nations

CASYS'97

1st International Conference on Computing Anticipatory Systems

Liege (Belgium)

August 11-15, 1997

Concepts, methods and tools related to natural and artificial anticipatory systems. Recursion, hyper recursion, incursion, hyperincursion. Sets and hypersets theory. Third order self-referential systems. Computation algorithms: cellular automata, neural network, genetic algorithm, artificial life and evolutionary computation. Research and development in mathematical modeling, simulation, optimization and control. Applications to engineering and business. Epistemology of externalist and internalist analysis of anticipation.

All papers will be refereed by an international scientific committee. All accepted camera-ready papers will be published.

NEWS FROM THE BOOK MARKET

Group Model Building Facilitating Team Learning Using System Dynamics Vennix Jac A.M.

Group Model Building fosters organizations learning through systems dynamics model building with groups within an organization. The emphasis is on the process of eliciting the required knowledge from the various organization members in order to be able to build a shared vision. The author illustrates how to integrate and represent this knowledge in order to increase the quality and speed with

which organizations learn. The theory and methodology is illustrated by practical applications.

John Wiley, 1996, ISBN 0471 95655, 250pp
£24,95 (hardback)

The future is not what it used to be'

Gerald Weinberg



Dear Members!

In this section you find the outcome of the IFSR's Strategy Meeting in Vienna on April 13, 1996.

Due to the limited space an account of our Italian member had to be postponed for the next issue..

As usual I repeat my request for more information on YOUR society. Share it with the other members of IFSR!

Hoping for a further fruitful communication

Gerhard Chroust

RESULTS FROM THE STRATEGY MEETING

Vienna, April 13, 1996

In its Strategy Meeting the IFSR discussed three main issues. Arne Collen and Michael C. Jackson have summarized the discussion:

What can a member organization do to help develop IFSR?

The discussion of this questions resulted in the identification of 15 activities. They were:

1. Contribute regularly to the IFSR Newsletter.
2. Conduct collaborative joint research team projects with other IFSR member organizations.
3. Organize and chair one symposium at EMCSR.
4. Hold (Fuschl-type) Conversations with other IFSR member organizations.
5. Provide a special issue of Systems Research.
6. Develop and maintain part of the IFSR WWW home page with member organization information and publications.
7. Develop a member organization WWW home page with links to the IFSR WWW site.
8. Exchange publications and educational materials with other IFSR member organizations.

9. Conduct on-line conferencing open to all IFSR members between the EMCSR meetings.
10. Sponsor publication of a book series in which IFSR and its member organizations can contribute.
11. Develop a prioritized set of problems and issues most important to the member organization and involve IFSR and other member organizations in addressing them.
12. Host exchange visits with other IFSR membership organizations.
13. Propose international research projects with IFSR sponsorship eligible for funding by the European Community.
14. Develop a consensus list of interests of one's members and make it known to IFSR and other member organizations.
15. Develop sources of financial support and funding of member organization activities that may be useful for joint sponsorship and support with IFSR and other member organizations.

What should IFSR do to co-ordinate research among member organization?

1. Create a list of active systems research groups in each country, obtain information from all societies on active research projects
2. Provide short notes on particular research projects in the journal
3. Each society to make known what is done in its country, perhaps via e-mail
4. Editing and distributing to each society the content of research projects of all the societies
5. Translate research papers
6. Establish lists of subjects for practical systems research
7. Find common points of interest for group research e.g. cities, unemployment, preservation of ecosystems, find systems research opportunities of high priority
8. Systematize systems concepts and research

9. Promote systems and cybernetic ideas as a catalyst for the creation of new ideas in, many disciplines
10. Write histories about important contributions of systems research
11. Create an electronic encyclopedia on the www, establish a repository of information
12. Publish the dictionary edited by Charles Francois
13. Provide updated list of IFSR members and e-mail addresses for more purpose-directed contacts
14. Joint international projects
15. Care about cybernetics and systems as a discipline in its own right and bring it to the fore
16. Engage in specific collaborative projects
17. Create opportunities of personal exchange
18. Establish funding society for non-subsidisable projects

How to improve Systems Research and build subscriptions?

1. Exchange advertisements with other international journals on systems and cybernetics
2. Appoint topic sub-editors and regional sub-editors

3. Merge other journals with Systems Research
4. publish an annual special methodology issue
5. insist every member organization must subscribe to a minimum number of copies
6. have special issues devoted to tutorial papers on specific subjects, more festschriften
7. publish abstracts on the internet
8. special issue, every second year, featuring graduate student papers
9. allow communications between authors and referees
10. guest editorships rotating around the national societies
- 11.
12. find means of translating abstracts into Japanese
13. more frequent meetings of the editorial board of the journal
14. more co-ordination between existing systems journals
15. translation of material from the Spanish language, e.g. material of the Argentine Society

WHAT'S NEW IN "SYSTEMS RESEARCH"?

The quarterly *Systems Research*, the official journal of the IFSR, is published by John Wiley and Sons. Papers for publication and subscription requests should be sent to:

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University of Humberside
Cottingham Road
Hull. HU6 7RT, United Kingdom
tel: +44 1482 440550 Ext. 3720
fax: +44 1482 445715

Contents of vol. 13, no. 3 (1996)

No. 3 is a very impressive 240 page issue devoted to Heinz von Foerster.

Editorial: Mike C. Jackson

Guest Editorial: Ranulph Glanville

A Note on Composition: Dirk Baecker

Social Work: 'Profession Without Qualities'. Attempt to Link Social work and Cybernetics: Theodor M. Bardmann

What You Get Is What You See: A Contribution to an Epistemology of Imagination: Graham Barnes

From Second-order Cybernetics to Cybernetics: A Semiotic Re-entry into the Second-order Cybernetics of Heinz von Foerster: Soren Brier

Demons-Magic-Cybernetics: On the Introduction to Natural Magic as told by Heinz von Foerster: Bernhard J. Dotzler

Observing Objects and Programming Objects: Elena Esposito

Choices about Choices: Christiane Floyd

Heinz von Foerster - The Form and the Content: Ranulph Glanville

Farewell to Objectivity: Ernst von Glasersfeld

Doomsday, The Internet, Diversity, and Sustainability: Robbin R. Hough

Virtual Logic: Louis H. Kauffmann

A Second-order Cybernetics of Otherness: Klaus Krippendorff

Shadows of Language in Physics and Cybernetics: Lars Löfgren

Membership and Motives in Social Systems:
Niklas Luhmann

Heinz von Foerster's Self Organization, the
Progenitor of Conversation and Interaction
Theories: Gordon Pask

Propositions on Cybernetics and Social
Transformation: Implication of von Foerster's
Non-trivial Machine for Knowledge Processes:
Laurence D. Richards and Rochelle K. Young

Eigenbehavior and Symbols: Luis Mateus Rocha

Trivialization and Empiricity; Siegfried J. Schmidt
Second-order Cybernetics as Cognitive
Methodology: Bernard Scott

The Early Days of Autopoieses - Heinz and
Chile: Francisco J. Varela

Heinz von Foerster at Stanford: David E.
Weldbery

Publications by Heinz von Foerster

Calendar of Events

Title	Date and Place	Further Information
Abbreviations: CfP, CfA: Call f.Papers/Abstract, FP: Final Paper due, <No. nn>: more details in issue.nn		
8th Int. Conversation on the Design of Social Systems (Asilomar Conference) <No. 15/2>	Nov. 2-7, 1996 Asilomar, USA.	Tad G. Frantz, Phillips Graduate Institute, Balboa Blvd., Encino CA 91316, USA, tel. (818) 907-9980, email: tadfrantz@aol.com
STIQE '96: 3rd International Conference on Linking Systems Thinking, Innovation, Quality, Environment and Entrepreneurship <No 40>	December 8 - 11, 1996 Maribor, Slovenia CfA: Aug 1, 1996 FP: Oct 1, 1996	Matjaz Mulej, University of Maribor, School of Business and Economics, P.O.Box 180 (EPF), SI - 62000 Maribor, Slovenia, Tel.: + 386 62 22 46 11, Fax: + 386 62 22 70 56, E-mail: MULEJ@UNI-MB.SI
2nd Workshop of the IIGSS <No 40>	Jan 9-11, 1997 San Marcos, Texas CfA: June 10, 1996 FP: Oct. 15, 1996	Dr. Yonghao Ma, Department of Mathematics, Southwest Texas State University, San Marcos, Texas 78666, USA, ma@iigss.math.swt.edu
EUROCAST '97: 6th Intern. Conference on Computer Aided Systems Theory and Technology <No. 15/2>	Feb. 1997, Las Palmas de Gran Canaria CfA: Oct 31, 1996 FP: Apr. 30, 1997	R.Morena-Diaz, CIICC, Universidad de Las Palmas d.GC, Spain, tel: +34-2845-87-50, fax -85, e-mail: roberto@grumpy.dis.ulpgc.es
ISSS-Conference 1997: Systems Thinking, Globalization of Knowledge, and Communitarian Ethics <No. 15/3>	July 22-25, 1997 Seoul, Korea CfA: Feb.15, 1997 FP: Apr. 15, 1997,	Kenneth D. Bailey, Dept. of Sociology, UCLA, Los Angeles, CA , tel. 1-310-825-1313, fax 1-310-206-9838, email: bailey@soc.sscnet.ucla.edu , Linda Peno, ISSS, PO Box. 6808, Louisville, KY 40206-0808, tel: 1-502-899-3332, fax 1-502-897-2461
CASYS'97 :1st Int. Conference on Computing Anticipatory Systems <No. 15/3>	August 11-15, 1997, LIEGE (Belgium), CfA: March 1, 1997 FP: June 1, 1997	Dr. Ir. Daniel M. DUBOIS, asbl CHAOS, Institut de Mathématique, Université de Liège, 15, avenue des Tilleuls, B-4000 LIEGE, Belgium. fax: /32/4/3669489, e-mail: dubois@lema.ulg.ac.be
ICEE-1997 - Int. Conference on Engineering Education: Progress through Partnership	Aug. 14-17, 1997 Chicago, USA CfA: Oct. 15, 1996 FP : April 1, 1997_	Joun Mead, Coal Res. Center MC 4623, Southern Illinois Univ. at Carbondale, Carbondale, IL 62901, USA tel. 1-618-536-5521, fax: 1-618-453-7346, email: jmead@siu.edu
EUROMICRO Workshop on Computational Intelligence	Sept. 3-4, 1997 Budapest, Hungary CfP: April 1, 1997	Bernd Reusch, University of Dortmund, Dept. of Computer Science, D-44221 Dortmund, Germany tel: +49-231-9700952, email: reusch@ls1.informatik.uni-dortmund.de http://LS11-www.informatik.uni-dortmund.de/EUROMICRO
SOCO'97: 2nd Int. ICSC Symposium on Soft Computing (Fuzzy Logic, Artificial Neural Networks, Genetic Algorithms)	Sept. 17-19, 1997 Nimes, France CfA: Jan 31, 1997 FP: May 15, 1997	ICSC Canada, PO Box 279, MILLET, Alberta ToC 1Z0, Canada tel: 1-403-387-4329, fax -3546, email: icsc@compusmart.ab.ca, www: http://www.compusmart.ab.ca/icsc/soco97.htm
IDIMT 1997, Interdisciplinary Information Management Talks	Oct. 15-17, 1997 Zadov , Cech Republic CfA: March 1997, FP: June 1997	Gerhard Chroust, Systemtechnik, Kepler Universität Linz, 4040 Linz, tel: +43-732-2468-866, fax -878 email:Chroust@SEA.uni-linz.ac.at