



# Newsletter

*Official Newsletter of the  
International Federation for Systems Research*

*Editor-in-Chief: Gerhard Chroust*

*Volume 28, no. 1 (August 2011)*



Bildungshaus St. Magdalena, site of the IFSR Conversation 2011

*Dear Members!*

*After all the excitement of 2010 with its multiple events, the IFSR prepares for 2012, when again IFSR's abilities will be strongly challenged. We are now in the throes of preparing*

- *The next IFSR Conversation (April 14 – 19, 2012)*
- *The next Board Meeting (April 13, 2012)*
- *IFSR's contribution to EMCSR 2012 (April 10 – 13, 2012).*
- *Improve the appearance and the interactivity of our home page*

*To all the events you find information and pointers on the following pages.*

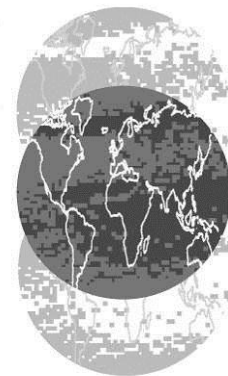
*Please supply us with pieces of information on your society and its activities to be put into the Newsletter and/or on the IFSR-website.*

*We also want to remind all of you who have not paid your IFSR membership fee, to do so as soon as possible.*

*With my best wishes*

*Yours sincerely*

*Gerhard Chroust*



ISSN 1818-0809 (print)

ISSN 1818-0817 (online)

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## IFSR President's Message

*As professionals who are interesting in systems, are we making progress? The connectedness of the world seems ever more apparent. Economic problems have continued to ripple from one continent to the next, creating political backlashes as citizens have lost jobs and benefits. Natural disasters seem to have been on the rise, along with the disruption they have caused to our human-made environments. The tsunami in Japan not only caused tragic losses there, but also affected energy policies about nuclear power around the world. Weather changes created discomfort in some places, but severe draught in others, resulting in human migration, refugee camps and backlashes in response. And social media has evolved from tools for connecting friends to a means for organizing the overthrow of governments.*

*The language of systems continues to find its way into common places, but still mostly in terms of describing the problems. Lacking are the viable solutions that garner public support. We get frustrated with "those in charge" for their narrow views and short-sightedness, but if the solutions that we offer are only doing more studies and writing more papers, it is no wonder that we get ignored by those who make the decisions, and are held accountable on an hourly basis.*

*Our systems organizations have begun, in a number of arenas, to reconnect with members and organizations based in systems engineering. The newest provisional member of the IFSR, in fact, is the International Council on Systems Engineering (INCOSE). The mutuality of the professions is not surprising when simply looking at the ways in which engineering is now being applied – in genetics and other biological developments; to environmental issues; in large-scale infrastructure projects, and so on. The importance for us – the systems communities – is the need to become involved again with the kinds of real-world issues which many of our founders faced.*

*Theories and ideas are important. How we think about the world changes what we see. But words left dormant on unread pages are of little value. What people do with the ideas makes a difference. In order to make progress as systems organizations and individual professionals, we need to join forces to to move from ideas to actions – and to share the accountability for the outcomes. My goal is that the IFSR helps to facilitate this work.*

Gary Metcalf



## Message from Vice President, Leonie Solomons

*Time runs by as we gradually make headway since my appointment last year as one of IFSR's Vice Presidents. For my part, we are on the verge of Metaphorum, based in the UK and working with Stafford Beer's legacy of Organizational Cybernetics, joining as an affiliate member of IFSR.*

*This is preceded by the prestigious INCOSE (International Council on Systems Engineering) joining IFSR as a full member. Here my congratulations go to Dr Gary Metcalf and David Ing in realizing this membership. INCOSE is very much practice*

orientated, compared to our more usual academic-research orientated membership organizations.

In the midst of the turmoil that attends many countries, the time may be approaching for systems based theories and approaches to reach a wider audience, particularly in practice. Thus my hope is that IFSR prepare for this opportunity. Next year when a selected group meets in St. Magdalena, Linz, for our biennial IFSR Conversations from April 14 to 19, 2012, I encourage those who attend to consider what role IFSR can play to take Systems Thinking into a wider community of practice.



In this regard, in July 2010 in Waterloo, we began to consider what it takes to move from a 2 to a 3 rating for our journal – *The Journal of Systems Research and Behavioral Science (JSRBS)*. It is a long road and the thinking has begun lead by Dr Amanda Gregory, Vice President IFSR.

This year at our meeting in Hull in July we somewhat followed Peter Checkland's SSM by employing a Rich Pictures technique (see at right) to start thinking about what role IFSR can play in taking Systems type thinking to a wider community so it moves beyond theory into the realm of widespread practice.

Leonie Solomons.



## 16th IFSR Conversation 2012 (Announcement)

St. Magdalena April 14 to 19, 2012



Based on the considerable success of the 2010 Conversation in Pernegg, the Executive Committee of the IFSR has decided to continue with the bi-annual Conversations. After considering other possibilities it has been decided to hold the Conversation in the 'Bildungsheim St. Magdalena' on the outskirts of Linz, Austria. As a result of personal experience Gerhard knows that this

place provides better facilities than Pernegg and is certainly preferable to the original Fuschl location. For details of the location look at [www.bz-magdalena.at](http://www.bz-magdalena.at) (at the moment unfortunately only in German). We expect to announce a first Call-for-Topics-and-Participation in fall of 2011. Watch the IFSR homepage (<http://ifsr.org/node/19>).



## IFSR Executive Committee report

During the ISSS 2011 conference in Hull the IFSR also performed some of its own activities:

- Executive Committee Meeting: We held a meeting of the Executive committee (which was spread over several days due to other commitments of its members)
- Session on the Journal of System Research and Behavioral Science: In this session we discussed, chaired by Amada Gregory, (right) with ISSS participants the situation and the future of IFSR's Journal for Systems Research and Behavioral Science (JSRBS)
- Meeting with INCOSE representatives: We had intensive talks with representatives of our new member, the INCOSE (Len Troncale, USA, and Stuart Arnold, UK).



## Welcome INCOSE! (International Council on Systems Engineering)

We are proud that INCOSE (the International Council on Systems Engineering) became member of the IFSR. The members of INCOSE (more than 8000 world wide) are more technology oriented than most of IFSR's member.

We are looking forward to cooperating in this highly important and fast growing interdisciplinary field of Systems Science and Systems Engineering.

We discussed with representatives of the INCOSE, moderated by Gary Metcalf, common fields of interest and potential cooperations (see above).

Dr. James Martin, chair of the Systems Science Working Group (SSWG) of INCOSE will be our principal contact point.

### Organizational Interactions 2010-2011

- Joint conferences and meetings (INCOSE Workshops; INCOSE Conferences; ISSS Conferences)
- INCOSE application to IFSR
- Projects: INCOSE Systems Science Working Group
  - Unified ontology of science & systems
  - Unified systems science theory
  - Systems pathologies
  - White Paper



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Dear Dr. Chroust,

On behalf of the International Council on Systems Engineering (INCOSE), I am pleased to submit this letter of application for membership in the International Federation for Systems Research.

...

We look forward to participating with other organizations within IFSR and to contributing to the development of systems science and its community. Thank you for the invitation and the opportunity.

Yours sincerely,

Dr. Samantha Robitaille  
President



## International Academy of Systems and Cybernetic Sciences



On April 7, 2010 the General Assembly of the IFSR approved the founding of the International Academy of Systems and Cybernetic Sciences (IASCYS). It is a body of activity within the International Federation for Systems Research (IFSR).

With sadness IASCYS has received the notice that one of our members, Ernst von GLASERFELD has passed away.

We welcomed two new members: Edgar MORIN and Erwin LAZLO.

We acquired the following internet domain Names for use by the IASCYS :iascys.info. iascys.net and iascys.org (none is operational yet!)

We have sent to our members (by e-mail) 38 call-for-papers, 12 pieces of information about IFSR's member societies and 7 announcements about Journals in the area of Systemics or Cybernetics.



## Research on Disasters and Systems Thinking

(some observations by Gerhard Chroust and Dennis Finlayson)

It seems that regional emergencies and disasters (many of them man-made or at least triggered by human activities) have grown in number, in scale and also in media coverage. Natural disasters, many of them triggered by human activities, seem to impact and threaten society in multiple ways and with increasing vigor. They endanger people, society, environment and economy in complex, interrelated ways and are in most cases multi-faceted, affecting numerous areas in varying ways. Typical examples are the volcanic eruption of Eyjafjallajökull (Iceland 2010) suddenly interrupting air traffic and thus impacting the economy, the local break-down of electric transmission lines due a tsunami (Fukushima, Japan 2011), endangering the cooling and thus the safety of an atomic plant.

Preventing, eliminating or at least mitigating the negative impacts of such disasters is one of the key task for First Responders (fire brigades, ambulances, emergency personnel, etc.) but also for the general public, industry and commerce. Gradually we realize that adequate responses to such disasters must be based on systemic approaches.

Where these situations have persisted over long periods or repeatedly occurred

conventional approaches to analysis would appear inadequate. These are precisely the contexts that systemic thinkers have the opportunity to offer richer approaches drawing on proven ideas within system theory such as requisite variety, for example.

Systemic approaches and the use of state-of-the-art Information and Communication Technologies offer improved ways of prediction, analysis and response by utilizing simulation, graphic representations (Virtual Reality), large data basis, artificial intelligence, and modern communication tools.

Similarly, critical thinkers might consider that the boundaries of relevant analyses might be redrawn and/or that a different vocabulary be sought. Clearly in any multi-faceted and multi-stakeholder crisis quantitative modeling would be expected to offer complementary tools to the more obvious applications of soft methods, but need to be non-naive in their assumptions, well researched in their information base and, as far as possible, expressed in accessible forms, if they are to find an audience beyond of the systems community, i.e. reach policy makers, emergency professionals as well as the communities they seek to serve.

In the last 2 years members of the IFSR were involved in several meetings and conferences where the issue of disasters and systemic reactions was one of the key topics.

### **ISSSS 2010: Waterloo, workshop: "Modeling Support for Disaster Prevention and Recovery Systemic Challenges for First Responders"** (chair Gerhard Chroust)

A full-day workshop was held on July 18, 2010, specifically addressing the needs of personell of fire brigades, ambulances, technical support teams and police and the possibilities of improving training via Information and Communication Technologies.

**ISSS 2010, Waterloo, paper session:** Several papers on issues of disaster were presented in different sessions, covering modelling both of disasters and disaster response organisation.

**ISSS2011, Hull, paper session: 'Systems Approaches to Conflict and Crisis'** (chair: Dennis Finlayson). 6 presentation in two 2 sections covered modelling of disasters, interventions in crisis, warning systems and problems of logistics.



*University of Hull, Business School, Hull, UK (Site of ISSS 2011)*

**ISSS 2011, Hull, workshop: 'Systemic Approaches to Regional Disasters'** (chair Gerhard Chroust and Dennis Finlayson.)

The workshop, held in two parts, provided an opportunity to follow-up on the issues brought up in the 3 paper sessions and on other issues not covered there.

Fifteen to twenty persons attended each of the two sessions. On both days hot discussions, not always structured took place.

Some of the general observations were:

Are problems of changing one's attitude 'dynamic conservatism' or simply 'resistance to change'?

We could see 'Re-solution' as in chemical reactions, but not as in mathematical activities.

One needs slack and redundancy in order to provide 'resilience' in projects.

One of the challenges is to staff a team with enough persons of different relevant and complimentary backgrounds.

Problems/issues needing systemic considerations (and solutions!): water



supply affected by cracking shale for gas, military intervention in foreign countries, decline of bee-populations the lack of ideas and collective ignorance, de-forestation and its effects, USA budget crisis, flu pandemics (underestimation versus over-reactions), problems of cleaning/clearing culverts – seen as a community project, immigration and integration, phosphorus becoming a scarce resource, etc.



**EMCSR 2012, Vienna : Paper session: ` Systemic Approaches to Disasters and Crisis** (chair: Gerhard Chroust and (t.b.a))

Some of the suggested specific topics are:

- Classification of disasters and their interactions and effects (e.g. floods, air traffic breakdown due to volcanoes, ...),
- Analysis of typical emergency scenarios
- Training support for First Responders using modern technology (e.g. Virtual and Augmented Reality, System Dynamics models, human evaluation models),

- IT support for prediction, tactical and strategic planning, and interventions (victim detection by RFID, infrared, heat, pattern recognition, etc.)
- analysis of deficiencies and improvement of organizational structures (e.g. Viable system Models, ISO standards),
- protection of emergency personnel (e.g. early danger detection and warnings),
- identification of road maps for further studies and investigations.

**IFSR Conversation 2012: "Systemic Approaches to Regional Disasters"** (chair: Gerhard Chroust)

This topic is one of the 4 or 5 topics to be chosen for the IFSR Conversation 2012.

We intend to discuss some or all of the following challenges:

How to

- predict and anticipate potential disasters and to design adequate avoidance strategies,
- prepare appropriate emergency plans both for the general public and for the interventions of emergency personnel based on sufficient knowledge, logistic support, and best-practices

- consider psychological and cultural differences and problems,
- simulate and optimize interventions and interventions plans by appropriate support tools during the interventions, resp. training
- provide realistic, but still safe training environments.
- provide fault-tolerant communication means for status information and support logistics during an intervention,
- plan and anticipate appropriate post-disaster recovery activities.



## IFSR MEMBERS Reports



## ALAS and GESI Latin American Association of Systemics

### The 4th Regional Congress of ALAS Buenos Aires, August 24 through 27, 2011

#### Summary

The 4th Regional Congress of ALAS, organized by GESI, place at the YMCA of Buenos Aires. Several valuable papers on the central topic of the Congress, the structural poverty in Latin America from a systemic viewpoint, were presented by members from Mexico, Venezuela, Brazil, Santiago del Estero, Patagonia and Buenos Aires, plus a video speech by Charles François and a two-hours conference by the world-known epistemologist Mario Bunge. Prior to the Congress, the institutional ALAS assembly took place, where we were fortunate to have with us Charles François, founder and honorary president of GESI, and where outgoing ALAS President Dean Ricardo Barrera outlined, based on the ideas of the member entities, an action plan for the next years. A new president of ALAS was elected: Ricardo Rodríguez Ulloa, president of IAS, Instituto Andino de Sistemas, Perú.

#### Highlights

- ◆ Two pre-Congress seminars were held: Ontology of Systems (Roberto Porebski and Ana María Vichi) and Ontology of Complexity (Luis Samolski).
- ◆ The following papers were presented and discussed: Nuclear Energy and the Chernobyl Syndrome (Roberto Porebski and Ana María Vichi), Systemic Modelization of Schools in High Risk Areas (Ana María Vichi and Roberto Porebski), Communicational Systemic Psychoanalysis (Eduardo Vizer and Helenice Carvalho), Poverty – Catastrophes – Poverty: a Tough Vicious Circle (Francisco Aceves), Poverty in Latin America: a Methodological Approach (Fabian Szulanski), The Caterpillar Strategy vis a vis Structural Poverty (Silvia Zweifel), Thoughts about Birth, Development and Fall of Political Systems (Antonio Martino), Corporate Social Responsibility, Social Economy and the State: Possibilities and Limitations in the Battle against Poverty (Carlos Molinari), Systemic Management of Knowledge – Intelligence – Wisdom in favor of Resource Equilibrium regarding Functional – Structural Poverty (María Aurelia Campos), Enthusiasm (José María Romero Maletti), Structural Poverty in Argentina and the Cultural System

(Ricardo Araujo) and Poverty: System Improvement or System Change (Enrique G. Herrscher).

- ◆ In addition, Pedro Luna presented the extraordinary research work and publications of FundArIngenio, mainly studying the systemic contents of the culture of Santiago del Estero province with UNESCO methodology.
- ◆ Due to illness, Ernesto Grün's paper The Present World System and its Future from the Systems and Cybernetics Viewpoint could not be discussed. The same, due to lack of time, happened with the papers by Augusto Barcaglioni and by Carlos Mallmann, as well as by Hernán López Garay, who brought us the greetings of ELAPDIS of Venezuela.
- ◆ A round table discussion, with the participation of Eva Sarka, Luis Samolski and Antonio Martino, facilitated by Enrique G. Herrscher, explored the interrelations of the approaches of the Poverty issues from the diverse outlooks, with many interventions from the floor.
- ◆ The closure speech by epistemologist Mario Bunge covered mainly two basic subjects: (a) the three ways to understand reality: (i) sectorialistic (focused on the individual, as in

liberalism and the economy based on specialization), (ii) holistic (focused on totality: sees the woods, not the trees, as in communism and totalitarian economics) and (iii) systemic (focused on the interactions among the components and the emergent properties of the whole, as shown in politics by socialism and in economics (rarely) by cooperativism; and (b) the three ways to analyze the historic evolution of systemics: (i) ontologic (studying categories of systems according to their properties), (ii) gnoseologic (studying it as a branch of knowledge), and (iii) praxeologic (studying it as a logic structure of human action).

- ◆ The Q&A period brought about some fundamental definitions: (a) the excessive specialization without integration is dangerous; (b) the so-called science of complexity is precisely the systems approach; (c) the true systemic approach is quantitative: its analysis and synthesis explains the quantitative; (d) the present "social complaints" (unrest, like May 1968 in France) have no future unless they insert themselves in political organizations; and many other similar statements.

Enrique G. Herrscher



**ASC**  
**American Society for Cybernetics**

**American Society for Cybernetics Conference on Listening,**

Richmond, Indiana, 9 to 15 August 2011

Over the past couple of years, the American Society for Cybernetics has been developing a new conference format. Rather than the traditional conference where we listen, in lecture format, to ready formed reports of answers to old questions, the main

feature has been to concentrate on developing new questions and understandings through conversational interchange in small groups. The quality of the conference is in the quality of the thinking each group practises. We have also experimented with pre- and post-conferences, in which we maintain a chance for ASC members to meet and to

discuss ASC business (and to present introductory tutorials to newcomers); and practice forms of reflection on the conference, of the field.

This year's conference, held in Richmond Indiana, addressed the topic of Listening. Listening is what creates conversation. It is of inestimable importance in conversation. In the main conference, as well as discussions on listening, we practised it through singing with the distinguished composer, Pauline Oliveros, and through workshops that explored listening experientially (for instance, Aartje Hulstein's workshop approaching physiotherapy as conversation between hands and body). We heard testimony from the local Quaker community and had a very full performance and music programme placing great demands on our listening abilities. We also accommodated more traditional paper presentations and proceedings will be published—of papers written after the event.

The conference was attended by 50 people. The ASC gave its Wiener Gold Medal to Mary Catherine Bateson and Robert Vallee, its McCulloch Award for achievement by younger person to Thomas Fischer, and its von Foerster award for the contribution of a young person to Delfina Fantini. A special award for outstanding service to the society was made to Randall Whitaker. Jennifer Wilby was the invited representative from ISSS.

The conferences were supported by a web site that grew as preparations and finally the conferences themselves. They were used so participants could get to know each other before the conference, read and comment on drafts of papers, and send suggestions. During the conferences a record of the activity was posted, which is still being developed. Please visit it at [www.asc-cybernetics.org/2011/](http://www.asc-cybernetics.org/2011/).



## BSSR Bulgarian Society for Systems Research

One of the main aims of the Bulgarian Society for Systems Research (BSSR), since its founding as a national society in 1994 has been to:

- Attract young and not so young researchers, lecturers and practitioners and help their studies by introducing them to possible benefits of systems thinking, of systemics in general.
- Supply them with news from the systems sciences community and offer possibilities for professional contacts, information exchange, exchange of visits, etc.,
- Help members to start joint research and apply for financed projects, and to
- Inform on current possibilities for further education for a broader audience that may benefit from

systems ideas and applications, etc.

During the last several years, the latter has become a focus of activity. We have been aware that systems analysis, systems research, systems thinking, etc. – all those domains that are embraced by systemics usually apply very sophisticated methods and basics of knowledge that only a limited number of people can cope with and use. However, the need of systems understanding and applying its wealth has a much broader audience.

The Fuschl Conversations supported by the IFSR has taught us to what extent “free hand drawings” and other visualizing methods express the inexpressible vague thoughts, while generating new knowledge, methods,

tools and visions, which would then be elaborated to concepts and programs for teaching and dissemination. A similar process experiences every person, while learning and allowing to be taught by professionals or by life itself.

Modern information and communication technologies (ICT) offer a vast number of tools for it, which are by no means sufficiently applied by systemic leaders, as the databank of systems publications gathered by the BSSR showed.

We turned to innovative forms of education looking for methodologies to bring systemics to a broader audience. In the meantime, ICT-based educational multimedia have developed a great variety of forms and excellence. For more than three years we have been taking part as affiliate partners in a series of European projects developing the excellence of ICT-based educational multimedia, evaluating the ones, which are present on European markets, developing criteria for the evaluation of the constantly growing quality of products, developing organizational criteria for teaching professionals how to evaluate their own creations or guide authors to apply the full range of innovations. It is a very accelerating modern process in education, in learning and teaching.

We also cooperate closely with the International Jury (consisting of experts

from Austria, Bulgaria, Cyprus, Czech Republic, Germany, Greece, Hungary, The Netherlands and Slovenia) from about 20 leading universities for evaluating:

- Didactic Multimedia Products (DMP),
- General Multimedia Products (AMP),
- Educational Management Systems (LMS),
- Computer games with potentials conducive to competence (CKP),
- Educational Media (political, modern historical, and inter cultural education) for Europe.

An International Jury supports the Society for Pedagogy and Information (GPI) and the European Society for Education and Communication (ESEC) to award the Comenius EduMedia Awards to outstanding products in the field of ICT-supported educational media and Erasmus EduMedia Awards to outstanding educational media for Europe. These products are applied for e-learning / e-teaching, blended-learning / blended-education, playful learning and management.

It is time for systemics to focus on and take up with the challenges of modern knowledge dissemination.



**CHAOS**  
**Centre for Hyperincursion and Anticipation**  
**in Ordered Systems**

This year CHAOS, one of IFSR's members, celebrated the 10<sup>th</sup> anniversary of the 10th International Conference, CASYS'11, on COMPUTING ANTICIPATORY SYSTEMS. The conference was held at the HEC - Management School of the University of Liege (HEC-ULg), on August 8-13, 2011.

The scope of CASYS'11 was oriented to theoretical developments and applications in natural and artificial computing anticipatory systems. A computing anticipatory system is a system that computes its current states in taking into account its past and present states but also its potential future states.

Strong anticipation refers to an anticipation of events built by or embedded in a system. Weak anticipation refers to an anticipation of events predicted from a model of a system.

For more information see the website: <http://www2.ulg.ac.be/mathgen/CHAOS/>



## HSSS Hellenic Society for Systemic Studies

The Hellenic Society for Systemic Studies (HSSS) organized its 7th National & International Conference, 'Professional Systemics in Action' from May 4 to May 7, 2011 in Athens, Greece. The conference was held in collaboration with the University of Piraeus and the Panteio University

The main theme of the Conference, was to present the dynamic scientific area of Professional Systemics applied effectively in organizations and enterprises across a wide spectrum of both service and production industry sectors

Given the dynamic nature of this challenging discipline, Professional Systemics in Action will bridge the gap between theory and practice and will promote the use of effective methodologies and multi-methodologies in managing today's organizational complexity.

Members of our interdisciplinary international community were present in

this Conference and presented scientific systemic tools and powerful specialized software to tackle up-to-date multi-dimensional complex problems and to manage their complexity in different applied areas of practice.

The prominent national and international invited keynote speakers of the scientific program, the exciting professional panels, the professional round table, and the professional workshop, attracted the attention of a large number of our colleagues. Further, the participation of members of the IFSR and the International Academy of Systems and Cybernetic Sciences (IASCYS), together with renowned consultancy firms of national and international stature, made this Conference a successful and memorable one in the history of HSSS Conferences.

For details see <http://www.hsss2011.gr/>



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IMPRESSUM: Mediuminhaber, Herausgeber, Satz und Layout: Int. Federation for Systems Research., Wien

f. d. Inhalt verantwortlich: Prof. G. Chroust, Kepler Universität Linz, 4040 Linz, Druck: WLK Druck, A-2340 Mödling23, Austria. (version 1.2 – minor updates)