



## International Federation For Systems Research

Proceedings of the

## Thirteenth Fuschl Conversation G. Metcalf, G. Chroust

(Editors)

April 22-27, 2006 Fuschl am See (Austria)

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#### Welcome to the Fuschl Conversation 2006

Matjaz Mulej (Slovenia)

As the newly elected president of the IFSR I would like to welcome you to the 13th Fuschl Conversation. This shows that Fuschl Conversations have a tradition of 25 years! But those of you who have been in Fuschl several times will notice several changes – more details you will find in Gary Metcalf's and Gerhard Chroust's Introduction below.

This was my first time at Fuschl. As the incoming president who knows in more detail the smaller member associations of IFSR rather than the bigger and older ones, I was looking forward to learning what they think of the program concept we have suggested:

- 1. IFSR should be an umbrella service organization covering topics that the individual member associations have hard times to do:
- 2. IFSR should sponsor some activities and organizational forms that would help both the systems community at large and all of us promote systemic thinking, observing, decision making, and action rather than the one-sidedness, which prevails in modern times to the detriment of humankind.

These two general aims may include:

- Foundation of an International Academy of Cybernetics and Systems Sciences, to which member associations would suggest their most prominent members;
- An active and interactive homepage with data and information from and for all member associations about their activities that might be of general interest rather than of internal interest only;
- International Encyclopedia of Systems Science and Cybernetics to continue the work done so far by Charles Francois;
- Activities that have been generally accepted so far as well.

I was very glad to hear a number of additional ideas, suggestions and volunteering voices in the five days at Fuschl. They are visible later on in this volume.

I am very grateful to Gary Metcalf, Vice-president, and to Gerhard Chroust, Secretary General of the IFSR, for working so hard and successfully for the Fuschl Conversation to go over the stage this year again and for these proceedings to be created from contributions of all participants and their summaries by group coordinators. The work of the latter was far from easy and deserves our big thanks

Looking at these proceedings I am proud that we have shown that IFSR – with the help of the Fuschl Conversation 2006 - will be able to even better serve the systems community and thus promote systems thinking.

Matjaz Mulej President of the IFSR 2006-2008

#### Welcome to the Fuschl Conversation 2006

Jifa Gu (China)

Fuschl 2006 was the only Conversation I was able to attend. As the president of the IFSR from 2002-2006, I was strongly involved in the planning and the re-direction of this Conversation. Fuschl 2006 gave me a deep impression in several aspects:

- 1) The meeting type attracted me very much; frankly speaking in China I never attended a discussion meeting like it.
  - (1) The meeting lasted five days which gave the full possibility for identifying the topics which we chose in advance:
  - (2) The topics were selected in advance by consulting with many participants and other related persons;
  - (3) The free discussion kept going all the time;
  - (4) I like the method which was used to determine the next topics which were to be discussed the next day by posting the small notes on the flipchart
  - (5) I like also some system methodologies, such as, VSM employed in the discussion to analyze the topic which we had identified.
- 2) Concerning the concrete contents of some of the topics I wish mention several points:
  - (1) We discussed the problems on survival of IFSR organization itself by using VSM. This showed IFSR's and the system organizations' has ability for self- criticism
  - (2) We discussed the Systems education problems. Even after Fuschl conversation we intend to keep some contact to discuss this problem, such as exchange the curriculum and program for system education furthermore. When I returned to China and told to my Chinese colleagues about this conversation, our colleagues express their interest also on this problem. Our country, however, is so large it takes a long time to collect more exact information, but we promised to do it.
  - (3) The discussion on establishment of The International Academy of System Science and Cybernetics had got a good start; Matjaz Mulej has prepared some more detail criteria for starting work on this new Academy.
- 3) Some words about the organization work:
  - (1) The hotel is quiet enough for us to discuss without interruption from outside
  - (2) I appreciate all participants for their continuous patience for attending the discussion
  - (3) I appreciate very much the nice organization provided by Gary and Gerhard; nearly every early morning and late days they worked for preparation for the next day's discussion, I didn't forgot Gary's help for buying the train tickets for us, also didn't forgot that Gerhard worked hard under the situation of the operation on his back not too long ago.
  - (4) I also wish express my gratitude to the volunteer organizers in different topics teams, they organize the discussion, gave the summary for discussion, take the photo and record for this conversation

Jifa Gu IFSR President 2002-2006

#### Fuschl 2006 - Aims and Objectives

Gary Metcalf (USA), Gerhard Chroust

Looking back at the past sequence of the biannual Fuschl Conversations one can distinguish several phases:

The initial phase from the start in 1980 until the 1994 could be seen as the *personal experience phase*. Participants attended the conversation without formal notice and without any attempt to disseminate afterwards their results to the outside world in a formal way. Typically there do not even exist reliable lists of the participants. These conversations were driven by the charismatic personality of Bela H. Banathy. The participants profited from Fuschl mostly themselves (Ch. Francois: "*When you leave Fuschl, you are a different person*").

By 1996 it was decided to give the Fuschl Conversation a little more structure. A formal Call-for-Participation was issued to the members of all member organisations and a participant selection procedure was introduced. A short account of the Conversation was published in the IFSR Newsletter and more detailed reports from the teams were published as proceedings (we may call it the *dissemination phase*). Around 28 participants were accepted to the Conversation, limited by both the hotel facilities and the financial resources of the IFSR which sponsored all Conversations. Traditionally we had 5 to 6 teams discussing different topics. :



**Gary Metcalf** 

When Bela was unable to join us in Fuschl from 1998 onwards, his spirit kept the Conversations going in a sense, but – as things develop – the ideas got gradually somewhat diluted, and we reached a *'diversification phase'*. Social Design was not the only focus any more. Also many participants discussed topics which were not really 'theirs'. At the closing of the Fuschl 2004 Conversation a certain feeling of uneasiness about the validity and the relevance of the Conversation was felt. It became clear that, if we wanted to sustain the Fuschl Conversations, we had to infuse a new spirit into them and that meant a new challenge for IFSR.

This development coincided with another change to the IFSR:

Based on preliminary discussions in 2002 by IFSR's then President Jifa Gu, the IFSR Board decided to hold its first Congress in Kobe, Japan, in November 2005, together with our new Japanese member, the International Society of Knowledge and Systems Science (ISKSS).

This congress will be remembered as a turning point in the history of the IFSR: For the first time IFSR was willing to really take a lead in the Systems Movement, we entered the *integration phase* for the Fuschl Conversations. This vision of the IFSR's new role could only be realized by achieving a consensus between our members and by an evaluation of the situation of the systems movement. This gave a new challenging purpose to the Fuschl Conversation: to provide a platform for

representatives of our member societies and other prominent scientists to evaluate the state of affair in systems, make some conclusions for the future and to give guidance and direction to the IFSR and its members.

We decided that the Conversation-style was the right tool and Fuschl the right environment to achieve our goal. For 2006 we choose topics which were relevant to the systems movement at large and to the IFSR in particular. We invited representatives of member organisations to suggest participants. Despite this break in tradition from the previous topic selection process we believe that this approach might even be more in the sense of Bela's original objective to make stakeholders discuss *their* problems and design *their own* system (see section "Topic 1: Fuschl Extension: Igniting a new Form of Conversation).

Given the double task of both evaluating the systems movement in general and IFSR's future role in particular was expected to create some confusion and some friction at the Conversation, and it did.



(from left) Gerhard Chroust, Doug Walton, Ms. Idinger

We consider the Fuschl Conversation 2006 is a singular event, a transition event, leading to the new integration goals of the IFSR via the Fuschl Conversations. The future will show whether we were successful.

As envisioned by Bela, preparation for a Conversation ideally begins as an outgrowth of a previous Conversation – or at least with many months of advance thinking and preparation. A topic is chosen by a team and individual input papers are prepared and distributed to allow the team members to further refine questions and to arrive at some shared understanding of the ideas and viewpoints of other team members. By the time the team arrives at the formal, in-person, face-to-face Conversation, a great deal of familiarity and background should already be established and the team simply move into an intensive phase of work that has begun.

In reality, that kind of collaboration between professionals at great geographic dispersion is difficult to achieve. Those difficulties were part of what had brought the Fuschl Conversations to a critical junction, and became magnified in many ways during the 2006 Conversation – a reality that should be instructive for us going into the future.

Preparations for the 2006 Fuschl Conversation were limited significantly by the IFSR Congress 2005 in Japan. (While this ideally might have been anticipated, first attempts at any new venture are difficult to predict.) In addition, having this Conversation coincide with the 25<sup>th</sup> Anniversary celebration of the IFSR provided an opportunity for a different use of the Conversation, as a way of addressing the future

of the IFSR itself. In that way, it became almost a meta-meta-Conversation – a Conversation about the IFSR (reflecting on itself) and its use of Conversation as an alternative meeting and design space.

This stretch in concepts, along with the shortened time for preparation, created much of the confusion that participants experienced at the beginning of the Conversation. While advance preparation had been attempted through information and dialogue, via a blog site, teams and topics were not set in the traditional way in advance. Part of this was purposeful, in that distinct teams working on separate topics had created at least part of the problems in recent years, in that teams had great difficulty sharing ideas and progress with each other, severely limiting the broader learning that might have occurred.

The initial topics that were proposed prior to the Conversation were:

Topic 1: The future of the Conversation process

Topic 2: Systems research and dissemination (e.g. publications, Internet access, alternative channels, access for students, etc.)

Topic 3: Systems and technology (e.g. what technologies should we be incorporating into Systems work, and how should we be affecting the development of technologies?)

Topic 4: The status and evolution of Systems organizations (e.g. what kind of Systems organization(s) are needed for the future?)

Topic 5: Systems and resources (e.g. how should Systems organizations access the necessary resources to survive and thrive into the future?)

The final topics were only decided in the first hours at Fuschl, by consensus of the participants. Topic 2 became a team which explored the identity and role of the IFSR, and ultimately the question of whether or not such an organization was needed. Topic 3 was explored only briefly, then incorporated into the work of other teams. Topic 5 became a team on Unity and Diversity, which explored many of the theoretical perspectives within systems work, and the resources that were available for working across some of the theoretical divides that have developed. In addition, an ad hoc team was developed to investigate work in systems education, including an informal analysis of what kinds of systems courses were being delivered, in what places around the world.

A number of participants strongly reacted to the idea of being limited to one topic, and wanted the flexibility of working across various teams, which was also accommodated. (In the end, most participants chose to stay with their teams the entire time, though.)

What actually occurred at the 2006 Conversation were many of the same dynamics that occur in most meetings that people experience. Some people were more familiar with the process than others, and those who were familiar felt some frustration with changes and lack of preparation. People who were unfamiliar tended to feel frustration with the lack of clarity, since Conversation is an unfamiliar, and not always specific, process. Different people also came with very different agendas and expectations about what should, or might, be accomplished during the week.

Because there had been an attempt to draw broad representation both from IFSR member organizations, and from systems organizations more globally, and because the Conversation followed the semi-annual meeting of the IFSR Board of Directors, several people believed the larger agenda to be about the identity and purpose of the IFSR as it existed. Others understood that it could be about the role of a unique organization like the IFSR (an organization of systems organizations) and how that might be more ideally designed for the future. Still others were interested primarily in specific topics addressed by individual teams, and had only limited interest in the larger topic of the Conversation as a whole. In the end, the Conversation gravitated between these various agendas, depending upon whose needs were being addressed at the time.

In the end, what resulted was actually very typical of a Conversation process. Some participants made tangible progress around specific topics – outcomes that could be used or even implemented after the Conversation. Other participants chose to explore more theoretical lines of exploration. Some people felt frustration with the lack of consensus or clear outcomes, but most everyone seemed to find the overall experience valuable, often in ways that were not easily captured. The most

common thread there seemed to be the very unique opportunity in today's world to have the luxury of time for thoughtful reflection with others.

With these proceedings we try to convey a realistic and largely un-edited record of the Fuschl Conversation 2006. The style and the level of detail differ depending on the reporter and the type of group. The reports in these proceedings should be considered as 'work-in-progress'.



(from left) Allena Leonard, Jeniifer Wilby, Jifa Gu, G. A. Swanson, Magdalena Kalaidieva, Doug Walton, David Ing, Gordon Rowland

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#### Conclusions of Fuschl 2006

Matjaz Mulej (Slovenia), Jifa Gu (China), Gary Metcalf (USA), Gerhard Chroust (Austria)

The 2006 Fuschl conversation was unique in several ways. It was essentially a meta-conversation in that it used the conversation setting to talk about conversation as a process. At the same time it allowed representatives of the member associations to consider the future of the IFSR and its role in the future of systems sciences. Discussions at such a level can be confusing if people gravitate to proposing and defending theories which may not be familiar to others. This is a key reason for having five-day, small-group meetings, which are a considerable exception to most other professional meetings now. It takes time for people learn to understand each other, especially when topics are large and abstract. Though the effort required was taxing at times, we can be proud of the number of additional ideas, suggestions and volunteering voices which surfaced during these five days at Fuschl.

General consensus seems to be achieved on the following conclusions:

Conclusion 1: The IFSR should be careful not to compete with its member organizations in any of its activities. The IFSR should be an umbrella service organization covering topics and activities that the individual member associations find difficult to do individually and consider important to many;

Conclusion 2: The IFSR should support and sponsor activities and organizational forms that would help both the systems community at large and all of us to promote systemic thinking, observing, decision making, and action rather than the one-sidedness, which prevails in modern times to the detriment of humankind.

Conclusion 3: Meetings like Fuschl 2006 are a useful means to bring systems organizations together and foster cooperation and common ideas.

Conclusion 4: Meetings like Fuschl 2006 are also very inspiring to the participants with respect to understanding and insight.

In more detail some of the salient comments/conclusions were (for more details see the proceedings):

- The IFSR can and should provide services to (a) society at-large (i.e. systems thinking, systems science, education), and (b) member organizations. These services should be agreed upon by the members and should not be in competition with the individual members' aspirations. Such services include:
  - o Foundation of an International Academy of Cybernetics and Systems Sciences.
  - An active and interactive homepage with data and information from and for all member associations.
  - International Encyclopedia of Systems Science and Cybernetics to continue the work done so far by Charles Francois;
  - Archiving Services, preserving, structuring and making available the legacy of system thinkers and the foundations of Systems Sciences.
- The IFSR should serve as an umbrella organization by
  - o coordination and supporting cooperation in the area of System Science and Systems Education, in view of professionalism and curriculum development and
  - establishing contacts and cooperation and support with Asian associations, as well as Latin-American and African.
  - Providing a Web-Site which provides strategic support for IFSR's objectives.
- The Fuschl Conversation should serve as a platform to both establish consensus between systems organization and serve as a guiding tool for IFSR's next future activities.
  - o There should be a Fuschl 2008 Conversation as a support for strategic decisions beyond the relative short board meetings of the IFSR.
  - Representatives of member organizations should be invited to the Fuschl Conversations.

- Essentially the Fuschl Conversations should be continued in the same form with improvements in the preparation and post-evolution, including selection process for topics and participants.
- The IFSR-oriented view of Fuschl should be reduced.
- The IFSR should initiate projects together with it members,
  - o The should be approved by the Board
  - o They should be useful for society at large and for the systems science field.
  - Projects should be of a kind which is outside of the scope or means of the member organizations.



Seehotel Schlick, Fuschl



#### **Topic 3: Infrastructure of the Systems Movement**

Reporter:	Ken Bausch (USA)
David Ing (Canada)	Gerhard Chroust (Austria)
	Magdalena Kalaidjieva (Bulgaria)
	Gary Metcalf (USA)

The triggering question was: "Systems and technology (e.g. what technologies should we be incorporating into Systems work, and how should we be affecting the development of technologies?)". On Wednesday, April 26, half a day was devoted to this discussion and it was felt that this essentially covered the topic and that these issues were not of prime concern to the participants. Other topics seemed to have higher priority.

Technology was the object and the target of the discussion as instrument to make the infrastructure functioning better. The infrastructure of the systems movement cannot be separated from its human potential component. It was implicitly put in the question 'How to evaluate and design information and technical components of the infrastructure under the present modern conditions, given the very different equipment in different parts of the world, as well as the global development of the Systems Movement?'.

This group discussed overall infrastructure, and then emphasized web presence.



(from left) G.A. Swanson, Allena Leonard, Jifa Gu, Magdalena Kalaidjieva, Ken Bausch

## The infrastructure of the systems movement has undergone great change over the past few years

The infrastructure may be represented as an input/output model which incorporates information flows, knowledge transfer, people, sources, flows and means of funding, etc.

#### Inputs include:

• Information on systems (and cybernetics). Scientific knowledge has to be considered from the viewpoint of colleagues demands and modern technological supply resources, e.g. education has to be considered throughout all segments of age, as it can be taught and then applied as life long learning,

- Information on how to get this knowledge and how to find it,
- Educational and research infrastructures to carry, transmit and generate new knowledge, Organisational infrastructures to carry and transmit all the previous: both interconnecting humans and interconnecting technical communication and memory devices. (This topic finds special treatment in Team 4 and was rather overlapping with Team 3.)
- university funding, that continues to fall;
- public and government funding, that has been reduced;
- corporate funding, that is potentially possible, but doesn't come without strings; and
- volunteerism that remains strong.

The legacy of the systems movement is strong, and continues to provide a foundation.

#### Outputs include:

- traditional knowledge dissemination channels, such as journals newsletters, scientific literature on physical long lasting media to be kept over generations, popular oriented knowledge dissemination
- · periodical personal meetings, e.g. annual meetings;
- a web/Internet presence. This raises a question "If you're not on the Internet, do you really exist

 New types of web/Internet presence for scientific literature and popular oriented knowledge dissemination (in full text and image) is the modern trend in information infrastructures.

- This put on the agenda the question of modernising the IFSR webpage and its provider's
  equipment with hard and software in such a way that it can support continuous distributed
  information pools and flows both for:
  - a) The IFSR representing web site, links and org-announcements, and
  - b) The knowledge dissemination "in full text and image". Magdalena noted that her team has made several offers starting with EMCSR 2002. which were postponed by the IFSR Board and the EC.

## The systems movement is continuing to deal with societal and productivity issues associated with web presence

Individual/personal web presence is a potentially growing trend, but the focus in the near term will remain on organizational issues.

The digital divide can be seen along multiple dimensions:

- Technological/social issues divide the "haves" and "have nots".
  - Much of the world still relies on dial-up, while modern urban centres offer broadband.
  - E-mail remains a reliable option, but young people are increasingly moving to Instant Messaging (or SMS).
  - Power outages can encourage online-offline switching, while the first world is "always on".
- Demographic issues shape the way the web is viewed.
  - The older generation thinks in terms of books, while the younger generation thinks in terms of net and web.
  - The older generation presumes static content, while the younger are always looking for dynamic content.
  - More mature users are more likely to think in single threads, while the young are accustomed
    to multi-threading (carrying on simultaneous conversations with a dozen IM screen
    concurrently open).
- Read culture is in contrast to read-write culture.
  - The majority of older people think of the web as static pages, whereas the young expect blogs and wikis.
  - Licensing such as Creative Commons takes some adjustment.
  - Presentation has moved from text to icons to multimedia.
- Technical resource issues must be resolved.

- Platforms are a tradeoff, as the state-of-the-art is currently Unicode enabled (allowing Chinese and Japanese characters on the same screen as Western), but Windows 98 clients require an upgrade to access.
- Skills can be chosen from volunteers, or from for-fee professionals, but quality is difficult to judge.
- Spam and hacking continue to be risks.
- The content on web sites of the systems movement suffers from relevancy and currency issues.
  - Can there be a systemic view (with or without branding)?
  - Systems as science (and not a metaphor) needs to be clarified.
  - The audience needs to look at systems as beyond simple answers.



In front of Hotel Schlick



## Topic 4: The Status and Evolution of Systems Organizations

Reporter:	Ken Bausch (USA)
David Ing (Canada)	Gerhard Chroust (Austria)
	Maria Mercedes Clusellas Cornejo (Argentina)
	Jifa Gu (China)
	Magdalena Kalaidjieva (Bulgaria)
	Allenna Leonard (Canada)
	G.A. Swanson (USA)
	Jennifer Wilby (UK)

#### **Triggering Questions**

In the first half day, the group coalesced on five triggering questions:

- 1. What identity/does should the {IFSR, systems organizations} have in the world and in the network of systems organizations?
- 2. What can the {IFSR, systems organizations} do to encourage and make affordable for {students, new members, fresh blood} to join, participate in, and continue with the systems movement?
- 3. Where can the {IFSR, systems organizations} get {material, energy, and information} to maintain themselves and the network as viable systems?
- 4. How does/should the {IFSR, systems organizations} respond to (anticipated) changes in the environment (e.g. globalization, Internet, ethics of inter-relationships at organizational and individual/personal levels)?
- 5. How does/should the {IFSR, systems organizations} reach out and reflect itself to the world (with emergence), and how we can plan and measure this?



David Ing

In the second half day, the conversation established some assumptions related to the above triggering questions:

- There is a systems movement. (1) [What are its boundaries?]
- The systems movement has a system of ethics. (4)
- The member organizations of the IFSR are a core group. (1)
- As member organizations, we share (and don't share) capabilities. (3,4)
- What they have to share is of benefit. (1,3)
- Founding individuals coalesced groups in different areas. (1)
- There are outputs, among organizations and to society. (3,4)
- The systems movement has a history, philosophical antecedents and core concepts. (1,4)
- We must have materials, energy and information to survive. (3)
- The systems movement is part of a changing environment. (4)
- The systems movement has the capacity/ability to influence. (4,5)
- We should meet face-to-face. (2.3)
- There is a systems movement in China. Different geographical areas have some overlap and some differences in boundaries. (1,4)
- Differentiations with the system movement are by: geography; interests and emphases (by the founders); language; disciplinary roots; (multi-)national societies/organizations. (1,4)
- The differences between us include: ontology; epistemology; methods, models and procedures; emergent disciplines (e.g. computational biology, systems biology, simulation) and their acceptance as being valid. (1)
- The systems movement features the emergence of new fields that spin off (at a high level, balanced (wholistic/concrete) level and/or concrete level). (1,4)
- Fray-out occurs with (i) some connection and (ii) with some separation. (1,4)
- It's the way we experience the world, and it provides connections with others who share this. (1,2,4,5)



(from left) Jifa Gu, G.A. Swanson, Maria Mercedes Clusella Cornejo, Doug Walton

Discussion on the second half day produced the following description resulting from triggering:

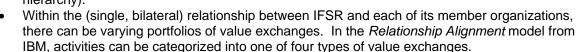
- The IFSR identity includes (as a unique selling/competitive point):
  - a mission;
  - · ethics;
  - services (reframed from activities);
  - limits (that are beyond our business);
  - that it is not a direct membership organization, so that it members are in themselves organizations.
- Systems organizations in the systems movement:
  - · have activities;
  - have members (of all types); and
  - have various identities (i.e. disciplines, localities, languages).
- The IFSR seeks and negotiates with organizational members. Other systems organizations generally recruit members directly. [Topics of attraction and affordability were left unanswered].
- Both the IFSR and systems organizations in general conduct activities/services for which they
  can charge. The IFSR should aim to share, and avoid redundancy or duplication with member

- organizations (e.g. the ISSS). A volunteer structure (e.g. ISSS) makes financial requirements less burdensome, but becomes a challenge for human resources.
- Both the IFSR and systems organizations in general should change to adapt to the Internet and services/content. They should maintain probes into the future.
- Both the IFSR and systems organizations in general should develop their adaptiveness to get the criteria for measurement. This creates challenges for creativity and commitment. The evaluation cycle should be shortened and occur more frequently. The IFSR should check in with member organizations with greater frequency.

On the second day, additional impetus to focus on the question "should the IFSR exist?" recentered discussion to seek deeper insight into the future of the IFSR. This resulted in some major themes.

### 1. The IFSR can be considered as akin to a trade organization in a network of system organizations.

- The IFSR should be thought of not so much as a hierarchical level above other systems organizations, but as a gatekeeper – often accelerating the flow of information – between systems organizations that are hubs in a network.
- In a network structure (see Mark Granovetter), the strongest ties between individuals is within each of the organizations (i.e. IFSR member organizations). Weak ties exists between IFSR member organizations. The IFSR can assist in creating new bridges along those weak ties.
- It can operate well in an ecology of systems organizations, in a polyarchical/heterarchical structure with polythematic directions (i.e. without a command hierarchy).



Transactional value	Value-added value	Specialized value	Unique value
exchanges:	exchanges: custom	exchanges: joint	exchanges:
available from any	offers from a small	engagements	specialized value
of multiple	number of providers, as	with unclear or	exchanges with
providers	small incremental	ambiguous ends	equity and risk
	benefits	_	sharing

- Each relationship between the IFSR and a member organization can be represented by different bundles of value exchanges in the above framework. [Greater detail was left as work for the future].
- The IFSR is incorporated under Austrian law.

# 2. The IFSR can provide services (a) to society (i.e. science, education), and (b) to member organizations that are (i) nascent in form (e.g. societies in developing countries) or (ii) mature (e.g. ISSS, ASC).

- The IFSR has a few large member organizations (e.g. China has 10,000 members, the ISSS has hundreds internationally, the RC51 has hundreds), with the rest as relatively small.
- Most IFSR member organizations are national, whereas the IFSR enables supra-national communication.
- The IFSR looks different (e.g. to a member of the ISSS or the ASC, compared to someone in Sri Lanka). Startup societies are more interested in legitimacy, and basic kits to start up a new organization.

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- The IFSR can provide linkages in multiple languages.
- Most multi-disciplinary teams operate at a low common denominator of a 7<sup>th</sup> grade level, that the systems movement helps to bridge.
- The systems movement used to be targeted at the informed layman, in the establishing of consensual linguistic domains.



(from left) Ken Bausch, Yoshihide Horiuchi, Barbara Rivera

## 3. In the ecology of the systems movement, the IFSR can provide redundant function to ensure robustness (i.e. beyond individual or institutional affiliations).

- Maximum efficiency in the systems movement may not be the highest priority, as the member organizations of the IFSR don't all have equal resources.
- The IFSR may play a coordinating role across systems organizations.
- The major functions of the IFSR are:
  - connection (e.g. Fuschl, newsletter, web site, journal;
  - legitimacy (e.g. recognition, structural status);
  - preservation of culture and artifacts;
  - translation (core values); and
  - an identity with the systems movement.
- These functions (listed in greater detail in section 5, below) may be devolved to member organizations (e.g. ISSS has its own connections), but coordination is distinct to the IFSR.

## 4. The design of the IFSR can be structured either centered (mostly) as (a) unfunded volunteers or (b) with external support (i.e. government or university).

- In contrast, the ISSS was reformed (circa 1997-1998) as a volunteer organization. The
  beginning of the death of the preceding structure was based on who got paid to come to a
  conference, and who did not. Privilege is at the root of these problems. Thus, the ISSS
  distinguishes itself by volunteerism.
  - Out-of-pocket expenses can be contrasted to professional fees.
  - Volunteerism means motivations can be different (e.g. for fun, versus for money). There can be a return on the personal investment of time (i.e. non-monetary, recognition).
  - If funds are available, there is a dilemma in giving an honorarium to an overworked volunteer, versus moving the tediousness to a paid contractor not otherwise associated with the society.

- Will the IFSR continue to have means of resources, e.g. from the government and/or universities? Should it plan for a future where these sources discontinue, and move conscienciously towards a volunteer structure?
  - Does the IFSR have the resources to carry out the projects put onto its plate? If yes, then it should focus on ends not already produced by other organizations in the systems movement. If not, ... (it needs to find another way).
  - In public universities, there may have been some shift from institutions to superstars. Superstars are considered to be rainmakers. In practice, it's often hard to judge whether moneys really flow to the institutions, or only through the institutions. The flow of government money to institutions may be tied to their non-profit, tax-deductible status.



(from left) Allena Leonard, Gerhard Chroust, Debora Hammond

## 5. Services are provided both (a) to society at large, and (b) member organizations.

Services provided to society include:

- archivist services (e.g. a part time person across multiple archives that can't individually afford one);
- expertise location (i.e. connecting someone with a credible expert, beyond simple directory services where the IFSR would lose against Google).
- limited legitimation services, probably not as detailed evaluations and certifications, but instead by sanctioning membership in the IFSR while excluding others.
- the encyclopedia, not as single definitions, but instead collections of definitions from multiple sources

Services provided to member organizations include:

- sourcebooks, e.g. introductory educational materials;
- intermediation between society and the systems movement,
- as particularly important for nascent organizations,
- including translation services (e.g. reviewing/editing/certification of only basic content, since this would be difficult in advanced topics that would require the shared context of collaborators:
- a journal, Systems Research & Behavioral Sciences;
- a book series (often known as G. Klir's series);
- proceedings;
- a newsletter;
- a web site (that could be defined either a push technology or pull technology);
- a journal of abstracts currently under development
- In the Internet world, this could be effective through the blogging of reviews online, if an appropriate reviewing structure could be established.
- potentially a citation index (or a Body of Knowledge publication, as in software engineering);

- match-making (mostly done at the board level);
- conferences (face-to-face, e.g. Fuschl).

#### 6. The major source of funds for the IFSR is currently the journal.

- Systems Research and Behavioral Science (JSR&BS) current makes a profit.
  - Some of this is due to editorial costs being borne by University of Hull.
  - Mike Jackson says that journal publishers generally have a lack of interest in distribution to individuals, because most of the money comes from subscriptions by libraries.
  - JSR&BS used to be published 8 times per year, and is now 6 times per year.
  - The backlog on publications is now 2 years (with UK faculty working to meet a measurement deadline in 2007).
  - The systems community should be encouraged to cite the journal, and not just the superstars.
  - Electronic access to the journals has an uncertain impact on the future.
- Should the IFSR look to the UN for support?
  - It shouldn't go to NGOs, because NGOs are political, and the systems movement is scientific.
  - The ISSS is a member of UNESCO.
  - The UN is current promoting programs related to democracy.
- The general shift in funding from the Austrian government to the EU hurt the IFSR, but in theory means a potentially larger source of funds.
  - The EU may have a history of awarding funds more towards superstars.
  - Funding from the EU to the IFSR is unlikely, but there's potential for funding of the Academy in the future.

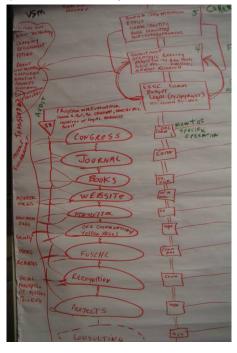
## 7. Professionalization and curriculum are open opportunities for IFSR that may require significant resources

- Does the IFSR want to become a professional society?
  - Like other organizations, it could provide certification, and require professionals to commit to continuing education.
  - The Academy may be a movement towards this.
  - It could maintain a roster of visiting professors.
- Should the IFSR mount a program to get systems back onto educational curricula?
  - The American model (IBM) is to fund professors, not institutions.
  - In contrast, other countries (e.g. EU) prefer funding institutions, not individuals.
  - EU proposals are largely limited to EU member countries.
  - The UN also accepts proposals.

### 8. Support and interest from Asia and corporate institutions can be further explored as opportunities for IFSR

Since support from European and North American governments is drying up, two alternative directions were explored: Asia and corporations.

In China, the systems movements started in the 1950s with operations research and math. In the 1970s, it moved to systems engineering with applications in industry and the military. By 2000, it had



moved to systems science (although the society's title hasn't been updated, reflecting the traditional heritage).

- In China, funding is only at the federation level, and not at the society level (as with the ISSS).
- Interests are primarily the promotion of standards in research, and new directions in research.
- In selecting international conferences, Chinese researchers will prefer to join an IFSR-affiliated conference (e.g. over ISSS) because the Chinese are members of the IFSR.
- The Chinese values the IFSR book series, as most can't appreciate the quality (good or bad) without some effort.
- In the Chinese philosophy of harmony, stability is preferred (e.g. over democracy, that may or may not be stable).
- The Chinese systems society currently pays 100 Euros fees annually. To provide greater
  working capital to the IFSR, fees at the level of 10,000 Euros would be out of the question.
  Even 1,000 Euros would be a stretch, even though 500 Euros might be a possibility.
  Extrapolating this level of funding as typical across the multiple IFSR members means
  continued limited resources for the IFSR to fund additional projects.

At the ISSS Meeting in Cancun 2005, Jim Spohrer from IBM was a plenary speaker describing the SSME (Systems Science, Management and Engineering) initiative.

- At the grandest level, SSME is impetus from IBM to encourage the movement of university curriculum oriented to a traditional industrial/product-based economy, towards one more appropriate for the services economy. The services economy may also be reflected by as a digital economy, knowledge economy or network economy. This is similar to IBM's push in the 1960s, "inventing" the field of computer science as independent from math departments.
- Services science reflects the desire for a stronger foundation, as systems science might provide. Services management and services engineering reflect a reorientation towards services from product-oriented views.
- Government, students and other employers are likely attracted by the prospects of job creation, and greater productivity.
- Systems thinking is already recognized as a component of SSME. The shift from products to services may be a natural evolution in a systems framework, away from material and more towards energy.
- IBM is encouraging the development of open courseware, which may be threatening to some
  universities. IBM typically funds professors, not institutions, although a professor could sponsor
  a master project.

## 9. The International Academy of Systems and Cybernetics Science is still undergoing development.

- It is currently in a draft proposal stage.
- The drafts were supported by the board in 2004, and in 2006.
- Currently, there are draft statutes.
- The next step is to discuss the draft, and the role of the Academy (if any) to air doubts.
- The Academy has the potential to fortify the movement.
- The idea of the Academy was developed from other professions: one professional (the Academy of Management) and two scientific (from Salzburg and Paris).
- It can help unite the systems movement, internationally.
- There will be a requirement that the individual must be from an IFSR member organization.
- The open questions are not legal, but what is the criteria of membership, and what topics should be covered.
- The idea is for a restricted number of individuals (between 12 to 50?) who demonstrate scientific excellence, in an honour society.
- It can be compared to a national academy, with restricted membership.
- An invitation gives selectivity and an aura.
- In China, there are 10000 researchers across many institutes. In the Chinese Academy of Sciences, there are 800 academicians, from which 100 are selected in honour. The average

- age of an academician is 65 to 70 (compared to institute researchers who may be 30 years old), and there are a few diligent researchers still working at age 80.
- The Bulgarian Academy of Sciences (BAS) has a structure similar to the most (European) Academies, who are estabished and governed in a certain way by the state. They are non-for-profit organisations, funded wholly or partially by the state budget; who are central for the countries 'grey substance', main intellectual core. BAS has 53 Members and 93 Corresponding Members, who might be engaged outside the BAS, and 3625 researchers in different scientific degrees and positions throughout its institutes. It publishes periodical annals "Comptes rendus de l'Academie bulgare des Sciences" as all similar academies.
  During the reformation period BAS put strong emphasis on postgraduate education and career development for all scientific degrees and positions inside of the Academy, but also providing services of the same level of educated persons in any positions in companies, non-for-profit organisations, state officials, etc., outside of it. For this purpose, a special PhD Career Development Center was founded, represented by a Rector in the Academy's management scheme.
- The New York Academy of Sciences (NYAS) is a global non-for-profit organisation functioning as a foundation on membership fees, donations, state subsidy, income from selling the Annals of the New York Academy of Sciences. The latter are not really periodical, but theme-oriented collections of survey articles by outstanding (teams of) scholars. As a parallel in the systems movement might be pointed to the Gerald Midgley's 4 volumes on key papers. In this way, NYAS provides its members with well composed brand new popular scientific knowledge, which is very constructive for younger scholars or for to find associations to knowledge domains other than the own one. NYAS is oriented mainly to natural sciences, much less to humanities and social sciences and it lacks any explicit link to systems and cybernetics. It is a good model for a well and long time functioning academy type of organisation: It is a nonfor-profit organisation with physical persons as members only. Their number reaches up to 40 000. The membership fee was \$115 during the 5 or 6 years, when I was an active member of it. The prices of the Annals vary from \$ 10 to several hundred, mostly \$100 to \$300.
- With respect to the International Academy of Systems and Cybernetics Science (IASCS) planned by the IFSR it is still necessary to decide who would/could become a members and what their purpose is. In constracts to IFSR's structure as a Federation of societies the The IASCS as a parallel organisation should be concerned with the individual physical persons as members only.
  Publishing Annals of the IASCS would be a very efficient step to develop the IFSR. However, a great deal of work has to be done, in order to reach a comparable quality of publications. Time has come to make this step in parallel with the efforts of on-line publishing (e.g. of encyclopaedic sources), in parallel with all proceedings of meetings and conferences (which already have the status of paper collections announcing single novelties), in parallel with journals, but with a much higher priority.
- The current write-up seems to speak to the very accomplished and new researchers, but not to middle practitioners who may become the future accomplished.



#### **Lessons Learnt - Fuschl 2006 Summary**

Reporter:	all participants
David Ing (Canada)	

#### What have we, the participants, learnt of value, this week?

- Reinspiration on working together, being able to work with others.
- Good to explicitly invite representatives from member organizations.
- For the first time, the IFSR asked who we are, what are we doing? Coming out of paradise, we realize that we are naked.
- Had a lot of complementary between organization structure, conversation, content community, and a meta-frame that could give deeper understanding.
- A lot of people who often don't meet each other, face-to-face, making connections.
- IFSR board meeting, statement that we are in crisis, this is the first time that we are not in crisis.
- Not quite in crisis, have some leeway to make changes in time. When you go home, we expect you to help. The obligation is also with you.
- IFSR doesn't have to be just a formality.
- There is value in IFSR and conversations, perhaps adapted, but the basic is on the right direction.
- Have to wake up members, before you get feedback. Should read the documentation more intensively.
- Got a better mandate here, than at the board meeting.
- If you want to have an organization that can serve whatever function, it can't do that meeting a few hours every two years. If want to have a service function, and members providing value to each other, need to have people together more frequently.
- Sensing inputs for the next few years.
- Learned some method to run a conversation.
- The way to understand a system is to disturb it.
- Who are we for? Not only for ourselves, but for a larger society.

#### **Outcome for the Fusch! Conversations**

- Should we have a future conversation? The mandate can only come from IFSR's Board. What are the expectation? Who initiates?
- We could export the conversation to others, but doesn't mean that it's part of IFSR. Wouldn't request money from the IFSR.

- Would we have a Fuschl conversation extension (cf. section "Fuschl Extension Emerges"), advertising, that would take away business from member organizations.
- Should we have a Fuschl conversation 2008?

#### IFSR and its member organizations

- Endorsment of members is necessary for many projects, members might reject project proposals (competitive issue!)
- Under the legal name of the IFSR, what are the legal limitations? Usual issues.
- What are things that the IFSR is allowed to e.g. with respect to competition with member organizations.
- Aims and constitution of some of the member organizations may be more restrictive than allowed by those of the IFSR. IFSR has to be careful.
- Sources for financing will have to be clear, due to money laundering questions in Austria.



(from left) G.A. Swanson, Debora Hammond, Gabriele Bammer, Jennifer Wilby, Wolfgang Hofkirchner, Ranulph Glanville, Amanda Gregory

#### Tasks and Projects for the IFSR

- Education
- · Archives (von Bertalanffy, Beer)
- Services science
- Books and papers, e.g. Churchman's work, Pask reader early work lost or held in memory of the few people.
- Have books of live investments, e.g. need to reintroduce Pask, since he wrote difficultly.
  - This is revenue neutral. Can be brought as a gift to the IFSR.
- May need translation between languages (with English as the international scientific language, or to other languages).
  - This not revenue neutral.

#### Projects

- Projects can be submitted to the IFSR Board for approval.
- Could invite other members to join these initiatives.
- Bertalanffy conference, is really part of the Bertalanffy Centre
- Clarification between IFSR projects, and those that are supported by IFSR
- Value exchange through the people that do have funds



- Journal: may have a board level issue in the future, as the university wakes up on resources required
- Systems Research was an initiative by the board.
- Encyclopedia project: has scope and finances, as previously discussed.
- Web site: need to upgrade the web site.
  - Trying to monetize the net would be amazingly expensive.
- Newsletter.
- ...Strategy for the future of the IFSR? Not a traditional organizational strategy, but instead projects, and potential coordination between organizations.



**Gerhard Chroust** 



#### Appendix: What is the IFSR?

#### The Background

A good half a century ago, right after the end of the dreadful period from 1914 to 1945 comprising World War I, the World Economic crisis, and World War II, scientists such as Ludwig von Bertalanffy, Norbert Wiener and their colleagues found a response to the terrible events that killed tens of millions of people: holistic rather than fragmented thinking, decision-making and acting. They established two sciences to support humankind in the effort of meeting this end, which is a promising alternative to the worldwide and local crises. These sciences were *Systems Theory* and *Cybernetics*. System was and is the word entitled to represent the whole. One fights one-sidedness in order to survive. Nevertheless every human must be specialized in a fragment of the immense huge knowledge humankind possesses today. Thus, one-sidedness is unavoidable and beneficial, too. But networking of many one-sided insights can help all of us overcome the weak sides of a narrow specialization. Thus, we all need a narrow professional capacity and add to it systemic / holistic thinking.

From this combination most modern equipment resulted, most modern knowledge in all spheres of human activity, solutions to environmental problems, etc. Most of the remaining problems can be ascribed to a lack of this combination, and there are many around that can hardly be solved without systems thinking and creative co-operation of diverse specialists.

Our responsibility for the future obliges us to try to improve the current situation and not to leave an excessive burden to future generation. The Founding of the IFSR

Since a system, in its general abstract definition, is more than its parts as well more than the sum of its parts, it was decided to interlink groups of system thinkers around the world and to try to find answers to some of the pressing problems of the world.

On March 12, 1980 during the 5<sup>th</sup> EMCSR-Congress in Vienna the three important societies in the area of systems research, the Österreichische Studiengesellschaft für Kybernetik, the Systemgroup Nederland, and the Society for General System Research founded the International Federation for Systems Research The key persons were: Robert Trappl, George J. Klir, Gerard de Zeeuw. They became the first officers of the IFSR.

Strong support came from the then Austrian Ministry of Science and Research in the person of Norbert Rozsenich providing some financial support and Paul F de. P. Hanika, taking the responsibility of Editor in chief of the Newsletter of the IFSR.

#### Aims and Goals of the IFSR

The constitution of the Federation states:

The aims of the Federation are to stimulate all activities associated with the scientific study of systems and to co-ordinate such activities at the international level by:

- co-coordinating systems research activities of private persons and/or organizations;
- organizing international meetings, courses, workshops, and the like;
- promoting international publications in the area of systems research;
- promoting systems education;
- maintaining standards and competence in systems research and education; and
- any other means ... [to] serve the aims of the members.

The first Board Meeting (June 1980) defined the Federation's goals:

- **Social Learning Goal**: Strengthen the programs of member societies by their involvement in the program and network of IFSR.
- Membership Development Goal: Facilitate (encourage) the development of Systems science in countries in which such programs do not yet exist or are now developing.
- Synergetic Goal: Develop implement evaluate IFSR-level programs to meet the purposes of

IFSR to advance systems science.

- **Resource Development Goal:** Identify an inventory of system science relevant resources, acquire those and make them accessible to member societies.
- **Global Mission:** Make contribution to the larger (global) scientific community, be of service to improve the (global) human condition, and enrich the quality of life of all. The Growth of the IFSR

Many prominent system scientists have been officers of the IFSR since 1980

starting	President	Vice-President(s)	Secretary/Treasurer
1980	George J. Klir	Robert Trappl	Gerard de Zeeuw
1984	Robert Trappl	Bela H. Banathy	Gerard de Zeeuw
1988	Gerrit Broekstra	Franz Pichler	Bela Banathy
1992	Gerard de Zeeuw	J.D.R. De Raadt	Gerhard Chroust
1994	Bela H. Banathy	Michael C. Jackson	Gerhard Chroust
1998	Michael C. Jackson	Yong Pil Rhee	Gerhard Chroust
2000	Yong Pil Rhee	Michael C. Jackson	Gerhard Chroust
2002	Jifa Gu	Matjaz Mulej, Gary S. Metcalf Jifa Gu	Gerhard Chroust
2006	Matjaz Mulej	Gary S. Metcalf	Gerhard Chrous

In the 25 years of its existence, the IFSR has shown a healthy growth. It now counts 32 members, representing scientists from 25 countries on several continents. They are:

American Society for Cybernetics

Asociacion Argentina de Teoria General de Sistemas y Cibernetica

Asociacion Latinoamericana de Sistemas

Asociacion Mexicana de las Ciencias de Sistemas

Asociacion Mexicana de Sistemas y Cibernetica

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

Associazione Italiana per la Ricerca Sui Sistemi

Australian and New Zealand Systems Group

Bertalanffy Center for the Study of Systems Science

Bulgarian Society for Systems Research

Centre for Hyperincursion and Anticipation in Ordered Systems

Deutsche Gesellschaft fuer Kybernetik

Gesellschaft für Wirtschafts- und Sozialkybernetik

Global Institute of Flexible Systems Management

**Greek Systems Society** 

Hellenic Society for Systemic Studies

Instituto Andino de Sistemas (IAS)

The International Institute of Informatics and Systemics (IIIS)

International Society for the Systems Sciences

International Society of Knowledge and Systems Science

International Systems Institute

Japan Association for Social and Economic Systems Studies

Management Science Society of Ireland (MSSI)

Österreichische Studiengesellschaft für Kybernetik (ÖSGK)

Polish Systems Society

RC51 on Sociocybernetics

Slovenian Society for Systems Research

Sociedad Espanola de Sistemas Generales

Systeemgroep Nederland

Systems Engineering Society of China

The Cybernetics Society

The Korean Society for Systems Science Research
The Learned Society of Praxiology

#### **IFSR Activities**

The IFSR pursues successfully numerous activities:

- Systems Research and Behavioural Science (ISSN 1092-7026), the official scientific journal of the IFSR, edited by Michael C. Jackson, published since 1984
- International Series on Systems Science and Engineering, IFSR's book series, established in 1985, edited by George J. Klir, now published by Springer, New York
- the yearly *IFSR Newsletter*, the informal newsletter of the IFSR (paper : ISSN 1818-0809, online: ISSN 1818-0817), published since 1981, edited by Gerhard Chroust
- The IFSR web-site (http://www.ifsr.org) informing the world about the Federation's activities
- the IFSR Fuschl-conversations, taking place every other year since 1982 in Fuschl near Salzburg, Austria, discussing issues of social learning
- Support for other events (e.g. the EMCSR-conference in Vienna every second year)
- Sponsoring a bi-annual Ashby-lecture at the European Meeting on Cybernetics and Systems Research (EMCSR)
- Organising the First International Congress of IFSR in 2005 in Kobe, Japan, Nov 14-17.

#### **Future Plans**

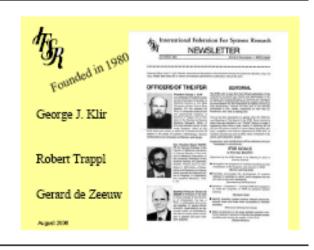
More than ever Systems Sciences are seen as a basis for balancing the divergent needs and interests between individuals and society worldwide, between ecology and economy, between nations of various levels of development and between differing worldviews.

The IFSR commits itself to increase its contributions answering the needs as expressed in its original aims and goals. Some new activities, in line with the needs and the challenges, have already been started:

- The Bertalanffy Library: In cooperation with the Bertalanffy Center for the Study of Systems Science (led by W. Hofkirchner) the IFSR will both help to preserve, revive and disseminate systems concepts and knowledge in general and L. v. Bertalanffy's ideas and work on General Systems Theory in particular.
- ESCO The International Encyclopaedia of Systems and Cybernetics based on Charles Francois' seminal International Encyclopedia of Systems and Cybernetics. This work will be continued, supplemented electronically as an attempt clarify and reduce inconsistent terminology and semantics in the field.
- The International Academy of Systems and Cybernetics (led by M. Mulej) as a forum for persons professionally excelling in System and Cybernetics Research
- The IFSR 200x Congress: The outstanding success of IFSR 2005 in Kobe, Japan, encourages the IFSR to organise a further IFSR-Congress in cooperation with one or more of its member organisations within the next 2 years.
- Current Officers of the IFSR

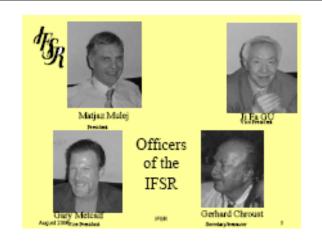


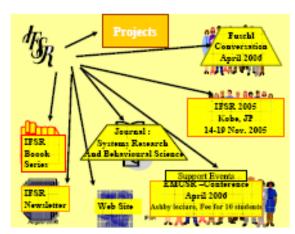


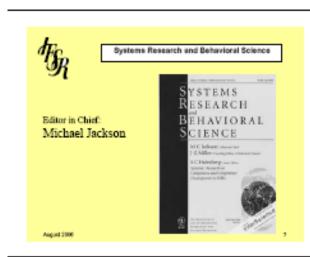












International Series
on Systems Science and Engineering
(Editor in Chief: George Klir)

Sestemic Intervention Philosophy Methodology and Practice
Gerald Midgley,

Sestems Approaches to Management
Michael C. Jackson

Fuzzy Relational Systems: Mathematical Foundations of
Relational Modeling in the Presence of Vagueness'
Radim Belohlaws.



#### The Fuschl Conversations

- since 1980
- · Main creator: Bela H. Banathy
- since then 45 Fuschl-style conversations world wide
- small teams (5-7 participants)
- Fuschl: 5 teams, 5 days
- http://www.ifsr.org/activities/fuschl\_ conversation.html

August 2000

IFSR



Bela H. Banathy +

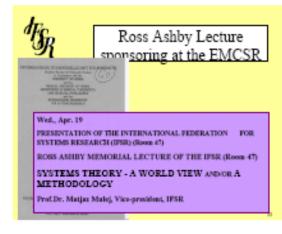


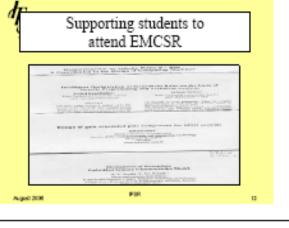
#### What is a Conversation?

#### A 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 [Bids H. Bussiy]

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#### Project:

#### Ludwig von Bertalanffy Legacy

- 1934 1948 Ass. Prof / Professor at the Institute of Philosophy und Biology in Vienna, Austria
- 1944 most personal papers lost (bombing in Vienna)
- 1948-1969, London, then Canada
- 1969-1972 Center for Theoretical Biology at the State University of New York in Buffalo.



#### The Bertalanffy Legacy

- March 2004 on Internet:
- "Bertalanffy's Legacy surfaced in Buffalo, NY"
- Hectic activities by IFSR:
  - Exclude competitors
  - Ensure authenticity - Guarantee safety
  - Guarantee scientific analysis
- June 2004: whole legacy goes to Vienna

THANKS to spousors!
And to Wolfgang Hofkirchner (Salzburg)



#### The Bertalanffy Legacy

- "Bertalanffy Center for the Study of Systems Science" (W. Hofkirchner)
- 500 personal letters (to and from), 1946-1972
- 150 monographies (various authors, partially signed)
- 120 manus and books by Bertalanffy

Currently catalogued and archived

Bertalanffy Center for the Study of Systems Science (BCSSS)

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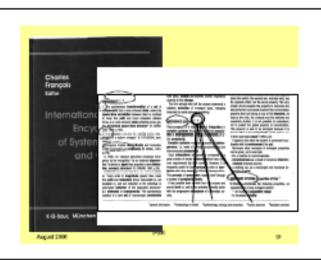
#### International Encyclopedia of Systems and Cybernetics

- In book form
- · Publisher: K.G. Saur, Munich, Germany
- IFSR pledges to continue its maintenance





Klagenfurt, Austria





#### ESCO

#### Encyclopedia of Systems and Cybernetics

- online extension of the Encyclopedia
- promote the Encyclopedia
- basic articles, reviews
- Biographies
- Systems Communities
- Include "The next Generation" of systems scientists
- Directory of Systems Scientists
- Systems bibliography

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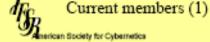
## Supporting our member societies

- Academy of Systems Sciences (planned)
- Web-site (modernization in planning)
- Function as Yellow Pages
- Dissemination of Info
- Coordinate Activities
- Conference Cooperation (no competition!)
- Help with Keynoters

Organise an IFSR-Congress

IFSR Congress 2005, Kobe, Japan IFSR Congress 2009, New Zealand, ???

August 2000



Asociacion Argentina de Teoria General de Sistemas y Cibernetica Asociacion Latinoamericana de Sistemas

Asociacion Mexicana de la Ciencia de Sistemas

Asociscion Medicana de Sistemas y Obernetica Associstion francaise des sciences et technologies de l'information et des systemes

Australian and New Zealand Systems Group

Austrian Society for Cybernetic Studies Bertalanify Center for the Study of Systems Science

Bulgarian Society for Systems Reseach

Centre for Hyperincursion and and Anticipation in Ordered Systems Deutsche Gesellschaft füer Kybernetik

Gesellschaft für Wirtschafts- und Sozialkybemetik.

Global Institute of Flexible Systems Management

Greek Systems Society

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#### WE WANT YOU!

- If you work in the systems area ...
- talk to us!
- join us!

The

INTERNATIONAL FEDERATIO FOR SYSTEMS RESEARCH

The aim of the Thirteenth Fuschl Conversation of 2006 was to assess the status of the Systems Sciences in general and based on that draw a road map for the IFSR, the International Federation for Systems Research, providing strategic and tactical guidance.

The Conversations basically followed the scheme used in earlier Fuschl Conversations as devised by Bela H. Banathy.

24 renowned systems scientists and systems practitioners from MM countries took part in that 5-day conversation. Most of the participants were also key officers in the member organisations of the IFSR:

The outcome of the conversation is summarized in 5 group reports and a feed-back report. Pictures also show the social ambience of the Fuschl Conversation.

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