

Joint Events of the Collocated Conferences

The 3rd International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2012

The 3rd International Conference on Society and Information Technologies: ICSIT 2012

The 2nd Ibero-American Conference on Complexity, Informatics, and Cybernetics

Conferencia Ibero-Americana de Complejidad, Informática y Cibernética: CICIC 2012

Conversational Sessions and Inter-disciplinary Communications

Purpose

The purpose of the conversational and inter-disciplinary communication sessions is to improve the effectiveness of traditional conferences characterized by just formal presentations via mostly unidirectional communications, and presented mostly for attendees in the same discipline. Polar opposites differentiate main characteristics of conversational versus traditional sessions. Table 2 of appendix B summarizes these opposite characteristics. On the other hand, polar opposites also differentiate essential characteristics of *inter-disciplinary versus intra-disciplinary communication*. Table 1 of appendix B summarizes these differences. Consequently, conversational and traditional sessions complement each other, as well as inter-disciplinary and intra-disciplinary communication. Conversational sessions included in the conferences organized by the International Institute of Informatics and Systemics (IIIS) are aimed at complementing traditional intra-disciplinary sessions with 1) conversational inter-disciplinary ones, and 2) traditional formal presentations but for inter-disciplinary communication in the context of a multi-disciplinary audience.

Input to meetings with conversational format is usually associated with *questions* and /or *problems*, while the usual input of conventional conferences is the presentation of papers, with *answers* to questions and/or *solutions* to problems, based on research activities, reflections and/or experience. The output of meetings with a conversational format is oriented to solutions or to the formulations of new problems and questions by means of knowledge communication, opinion or reflection sharing, knowledge production and idea creation. The output of conventional conferences is usually oriented to knowledge or information communication, mostly in a *unidirectional* way, via the presentation of papers. Creation usually precedes the conference presentation, while individual and group creation (Synectics) is an integral part of the conversational meetings. More details can be found at www.iiis.org/conversational-Sessions, and more details with regards to inter-disciplinary communication can be found at <http://www.iiis.org/Nagib-Callaos/Interdisciplinary-Communication>. A copy of the second document will be provided at the conference registration desk.

Following some suggestions made by participants in past conferences, *plenary* conversational sessions will be explored in the Spring 2012 conference, in order to increase the *variety* of disciplines included in the conversations, which is essential for an adequate effectiveness of interdisciplinary communication. Two plenary conversational sessions have been included in the conference program, in the context of plenary panels, and one has been included in the context of a Participatory Workshop. Plenary keynote addresses will be delivered before the respective conversational session. The three of them will have a follow-up through virtual conversations and probably special issues in the Journal of Systemics, Cybernetics, and Informatics.

Focused on the ideas and purpose mentioned above the Organizing Committee prepared a conference sub-program (Appendix A) with regards to the symposia, special tracks, and sessions related to 1) Inter-disciplinary Communication and 2) conversational sessions. While elaborating this conference sub-program, the Organizing Committee tried to prevent breakout sessions, oriented to conversational sessions and inter-disciplinary communication, from running simultaneously, affording participants, interested in the above ideas and purpose, the opportunity to attend most the sessions of this conference -subprogram

Authors registered at any of the collocated events were invited to submit proposals for additional inter-disciplinary Sessions (at no additional cost), where disciplinary or cross-disciplinary research could be presented for inter-disciplinary communications in the context of a multi-disciplinary audience. This resulted in two breakout sessions specifically devoted to inter-disciplinary communications.

Appendix A

Conference Sub-Program Related to:

Special Track on Case Studies and Methodologies: stCSM 2012
2nd International Symposium on Integrating Research, Education, and Problem Solving: IREPS 2012
International Symposium on Interdisciplinary Research, Education, and Communication: IDREC 2012
March 26th - 28th, 2012 - Orlando, Florida, USA

The organization of the Special Track on “*Case studies and methodologies*,” has been inspired by professor T. Grandon Gill’s book *Informing with the Case Method* (2011, Informing Science Press). This book demonstrates how the case method can be effective in 1) relating different disciplines and 2) integrating research, education, and consulting activities. When science and technology are deployed in a real-world setting, a narrow disciplinary perspective that ignores the broader context is invariably fragile; true understanding demands considering the influences of all the technological and organizational systems in place. A rich dialog with practice necessarily accompanies in-depth observations in the field; these dialogs build enduring bridges through which later ideas can travel. Classroom discussions of case studies can be used to establish an informing community linking research, practice and students.

These relationships motivated this special track on “*case studies and methodologies*” (stCSM 2012) via invited session(s), conversational session(s), and a workshop, and jointly with:

- 1) The International Symposium on Interdisciplinary Research, Education, and Communication: IDREC 2012, and
- 2) The 2nd International Symposium on Integrating Research, Education, and Problem Solving: IREPS 2012

Since “*Case studies and methodologies*” nurture, and are nurtured by, processes of 1) integrating academic activities and 2) Interdisciplinary Research, Education, and Communication, the purpose of the co-organizers of this special track is to generate synergic relationships among the three events: IDREC 2012, IREPS 2012, and stCSM 2012, as illustrated in Figure 1. Cybernetic loops of regulative and positive feedback might generate synergic effects among the three of them. Consequently, the Organizing Committee tried to prevent breakout sessions related to three topics from running simultaneously, affording participants the opportunity to attend or sample all three.

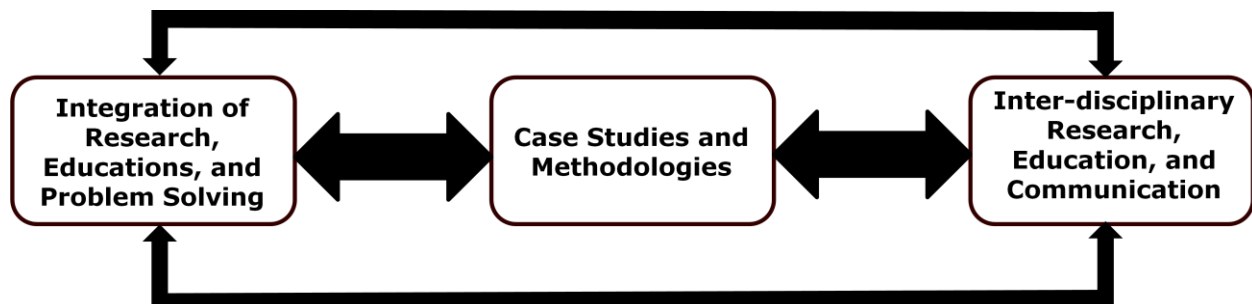


Figure 1

In total, the IREPS/ stCSM/IDREP 2012 sub-program generated 11 sessions. These sessions have been organized according the following schedule:

Monday, March 26th, 2012

10:20 AM - 12:20 PM **Breakout Session:** Inter-disciplinary Research, Education, and Communication (IDREC)

1:30 PM – 3:30 PM **Participative Workshop:** Professor T. Grandon Gill (University of South Florida, USA), *Case Studies and Methodologies and Integration of Academic Activities.*

This workshop will introduce participants to Case Studies and Method by showing the possibilities they generate for the Integration of Academic Activities

A mix of presentation, exercises and discussion, the topics to be covered will include:

- What is the case method?
- Different types of case study and how they are used
- Steps in developing authentic case studies: from recruiting sites to publication
- Facilitating case discussions in the classroom
- Measuring case method learning outcomes
- Publishing case studies
- Opportunities for funding case method projects
- Broader impacts of case method on the individual and institution

The facilitator, Dr. T. Grandon Gill, has extensive experience in case method research, as well as in writing cases for classroom use and facilitating case discussions. His MBA and DBA are both from Harvard Business School, where the case method originated. He is author of the book *Informing with the Case Method* (2011, Informing Science Press) and recently became the founding editor of *Journal of Information Technology Education: Discussion Cases*, a publication outlet for case studies in the MIS, IT and informing science fields. Interested participants will be encouraged to remain in touch with the facilitator for possible participation in future grant initiatives and workshops.

4:00 PM - 6:00 PM **Invited Session:** Case Studies and Methodologies I (IREPS/stCSM)

Tuesday, March 27th, 2012

10:20 AM - 12:20 PM **Breakout Session:** Integrating Research, Teaching and Practice (IREPS)

10:20 AM - 12:20 PM **Breakout Session:** Inter-Disciplinary Communications (IDREC)

1:30 PM – 3:30 PM **Plenary Conversational Panel** on “Case Studies and Methodologies”

4:00 PM - 6:00 PM **Invited Session:** Case Studies and Methodologies II (IREPS/stCSM)

Wednesday, March 28th, 2012

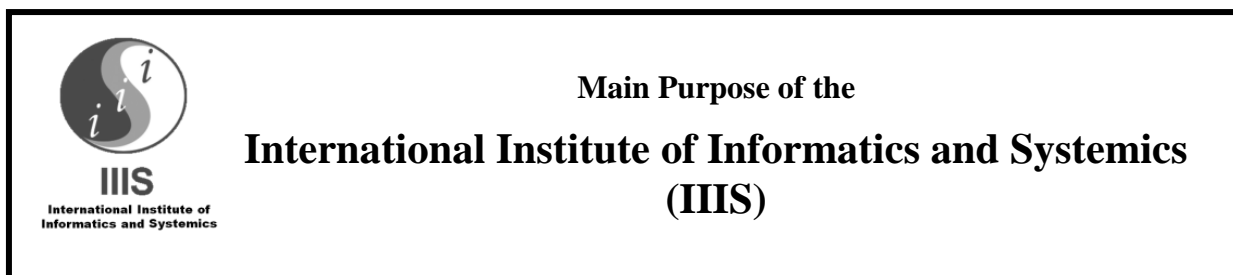
10:20 AM - 12:20 PM **Breakout Session:** Informing and Teaching (IREPS)

10:20 AM - 12:20 PM **Breakout Session:** Inter-Disciplinary Communications (IDREC)

1:30 PM – 3:30 PM **Plenary Conversational Session** on “Reflecting on Inter-disciplinary Communications” (IDREC)

4:00 PM - 6:00 PM **Invited Session:** Case Studies and Methodologies III (IREPS/stCSM)

Appendix B



A main purpose of the International Institute of Informatics and Systemics (IIS) is to foster knowledge integration processes, interdisciplinary communication, and integration of academic Activities. Based on 1) the transdisciplinarity of the systemic approach along with its essential characteristic of emphasizing *relationships* and *integrating* processes, and 2) on the multi-disciplinary support of informatics concepts, notions, theories, technologies, and tools, the IIS has been organizing in its initial phase multidisciplinary conferences as a platform for fostering inter-disciplinary communication and knowledge integration processes.

Multi-disciplinary conferences are organized by the IIS as support for both **intra-** and **inter-disciplinary** communication. Processes of intra-disciplinary communication are mainly achieved via traditional paper presentations in corresponding disciplines, while conversational sessions regarding trans- and inter-disciplinary topics are means for inter-disciplinary communications. Intra- and inter-disciplinary communications might generate *co-regulative cybernetic loops*, via negative feedback, and *synergic effects*, via positive feedback loops, in which both kinds of communications could increase their respective effectiveness. Figure 1 shows at least two cybernetic loops if intra- and inter-disciplinary are adequately related. A necessary condition for the effectiveness of Inter-disciplinary communication is an adequate level of **variety** regarding the participating disciplines. Analogical thinking and learning of disciplinarians depends on it, which in turn are potential sources of the creative tension required for cross-fertilization among disciplines and the generations of new hypothesis.



Figure 1

In many senses, Intra- and Inter-disciplinary Communications are polar opposites. They do not contradict, but complement, each other. Table 1 schematically contrasts characteristics of both kinds of academic communication.

Up to the present, the IIS has been using the format of conversational sessions to support inter-disciplinary communications processes. Table 2 schematically contrasts characteristics of both kinds of academic communications. As a second phase, IIS is starting a process of written inter-disciplinary communication via special issues in its journals, short monographs, multiple author books, etc.

As it is known, identification of analogies among disciplines is being increasingly favored by academic and research institutes. A progressively larger number of eminent scientists are supporting inter- and trans-disciplinary research and communication. Some of them decided to dedicate an increasing intellectual effort to this issue, as it is the case of the theoretical physicist and Nobel Laureate Murray Gell-Mann. He explains his perspective on this issue by 1) using the differentiation (made by Shelling and Nietzsche) between “ ‘*Apollonians*,’ who favor logic, the analytical approach, and a dispassionate weighing of evidence, and ‘*Dionysians*,’ who lean more toward intuition, synthesis and passion,”¹ who are respectively associated with left brain and right brain processes; and 2) by introducing the category of ‘*Odysseans*’ who *combine and integrates Apollonian and Dionysian perspectives*. Murray Gell-Mann relates a metaphor we use in the IIS, to describe the differentiation and integration between the Apollonian left brain and the Dionysian right brain. It is the *corpus callosum* that actually connects them physiologically, relating the two kinds of mental processes. Accordingly, a basic purpose of conferences organized by IIS has been to support processes for this kind of integration, and it has been described for about 15 years in the terms included in Figure 2.

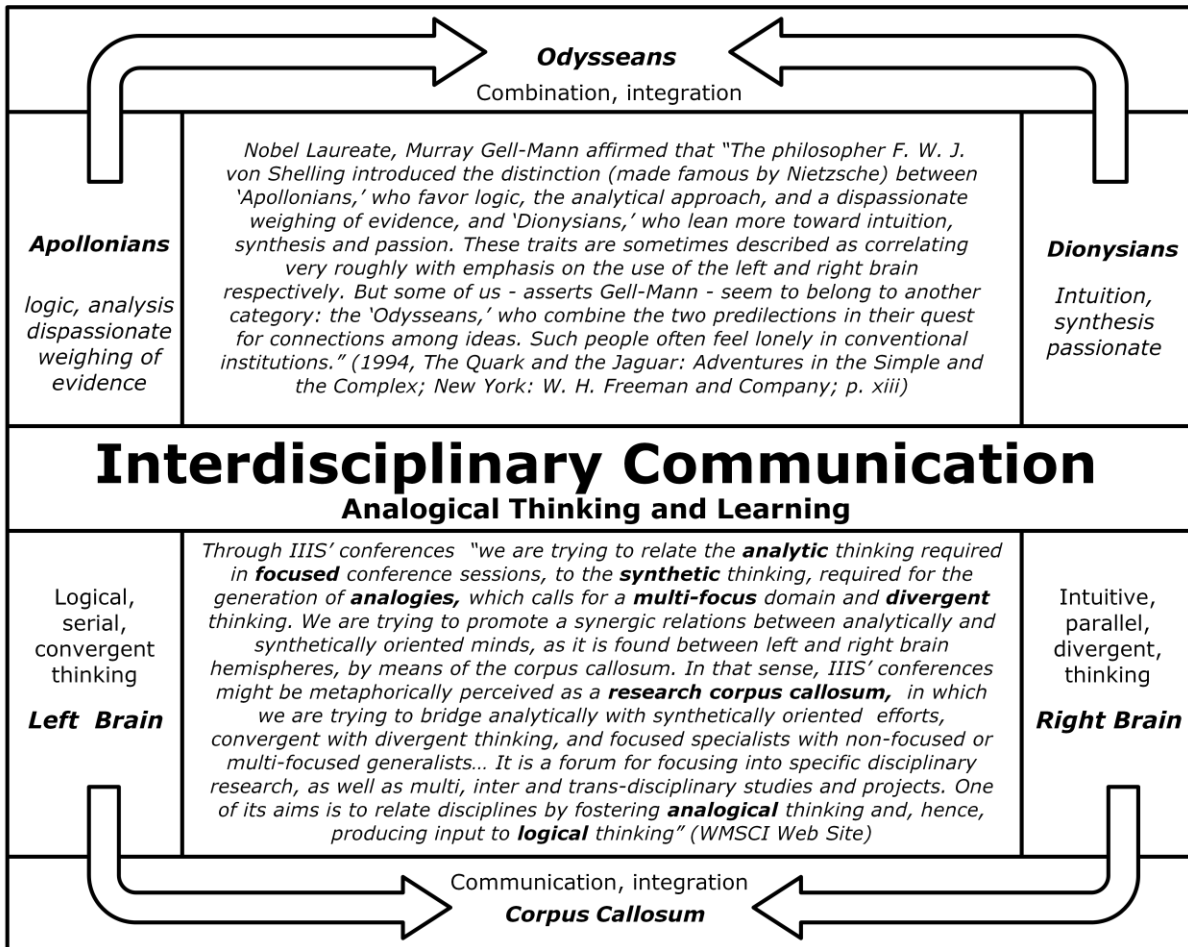
Inter-Disciplinary Conversations or Dialogues: Academics, professionals, and practitioners have increasingly been using the conversation, or dialogue, format as an **alternative** to the conventional conference format. We think that the conversational format might also be used, not just as an alternative, but concurrently with conventional conferences in a way as to generate synergic relationships between both formats/models. If this combination is feasible, then the intra-disciplinary and inter-disciplinary communication might be implemented simultaneously though the same meeting or conference.

To our knowledge, the largest meetings with the conversational format are The Fuschl and The Asilomar Conversations. The Fuschl Conversations have been organized every second year for about 30 years by the International Federation of Systems Research (IFSR), and The International Systems Institute (ISI) has organized 25 meetings with the conversational format since the early 80’s, the Asilomar Conversations being the core of them. The late Bela H. Banathy, former President of the IFSR and the ISSS (International Society for Systems Research) was the founder of these two series of meetings with the conversational format. The experience gathered in these conversations supported the organizing process of conversational meetings in the context of the conventional conferences organized by the International Institute of Informatics and Systemics (IIS) since 2006.

Organizing conversational meetings in the context of conventional conferences might support the generation of ideas with regards to the possible synergies that might be generated my means of combining both models and the ways of implementing them with the purpose of 1) increasing the

¹ Gell-Mann, M., 1994, *The Quark and the Jaguar: Adventures in the Simple and the Complex*; New York: W. H. Freeman and Company; p. xiii

effectiveness of conventional conferences, and 2) synergistically combining intra- and inter-disciplinary communication.



Copied from N. Callaos. 2011, Interdisciplinary Communications, <http://www.iiis.org/Nagib-Callaos/Interdisciplinary-communication>

Figure 2

The conversational and the conventional conferences formats oppose each other in several aspects. The table 2 below summarizes some of them. It might be thought that because of these opposite aspects of both models, the respective meetings have been held separate from each other. But, in our opinion, this opposition does not necessarily mean a **contradiction**; it might be handled as a **polar** one from a synergic perspective, or a complementary opposition, where each opposite requires each other to generate a **synergic relationship** or to produce positive **emergent properties**, where the whole is more than the sum of its parts. As it could be noticed, the conversational format would be more effective for intra-disciplinary communication, and the conventional format is more adequate to intra-disciplinary communication. Holding both kinds of academic communications might generate synergies providing disciplinarians 1) with the support to **transmitting** knowledge obtained by means of their research in a conventional format, and 2) with the opportunities for analogical thinking and learning via the conversational format, which might provide them with the opportunity of **creating** knowledge, or **generating** new hypothesis to be tested in future research.

Inter-Disciplinary Versus Intra-disciplinary Communication

Inter-Disciplinary Communication	Intra-Disciplinary Communication
Oriented to analogical thinking and learning	Supported by logical thinking and informing
Based mainly on Synthetic or integrative (probably via syncretic and/or eclectic) thinking	Based mainly on analytical thinking
Dionysians traits: leaning to intuition, synthesis and passion; and/or Odysseans traits : combining the two predilections in their quest for connections among ideas.	Apollonians traits: favoring logic, the analytical approach, and a dispassionate weighing of evidence
Systemic Insertion of research results	Systematic presentation of research results
Strategic intentional ambiguity is required for effective communication with multi-disciplinary audience.	Precision is valued.
Tradeoff between rigor and adaptability to different disciplines, or multiple rigor versions according to the sought audience plurality	Maximization of rigor according to each disciplinary epistemological values and consensually accepted methodologies.
New relationships based of not necessarily original ideas are valued.	Original ideas are valued.
Dialogical and/or Mono-Dialogical Orientation	Monological and/or multi-monological orientation generating potential debates.
Conversations and dialogues	Discussions, argumentations, and potential debates.
<i>Homo dialogus</i> : intellects relating to themselves by means of interacting with other intellects via dialogics.	<i>Homo argumentus</i> : intellect relating to others to win an argument by means of relating to themselves via logical thinking
Reveals assumptions and premises for reevaluation.	Defends or attacks assumptions or premises
<i>Require temporarily suspending one's beliefs and assumptions.</i>	Require conviction in one's beliefs and assumptions.
Since enthymemes (syllogism in which one of the premises is not stated) are frequently used in conversations or dialogues, communication processes should include the identification of implicit or tacit disciplinary premises.	The identification of implicit or tacit disciplinary premises is not always a necessary condition for an effective communication.
Frequently causes introspection on one's own position.	Frequently causes critique to other's position
Dialectic as creative tension based on differences identification and opposite perspectives	Dialectic as argumentation, with which opposite opinions are confronted as a way of showing which one represent the truth, or which one is false; or as the sense of art or science of proving through logical argument
Participants search for basic agreements and difference identification is used as potential learning sources in order create knowledge or extend the intellectual common ground.	Perceived differences are conceived as contradictions which should be faced by means of showing the truth or the falsehood of the contradicting thesis or ideas.
Multiple disciplinary dialects might lower communication effectiveness.	Efficient communications through disciplinary dialects
Identification of synergic polar oppositions	Identification of contradictions.
Shared meaning and understanding	Truth/false identification and transference
Communicants submit their best thinking, knowing that other people's reflections might support their respective improvement.	Communicants submit their best thinking and defend it against challenges to show that it is right.
Non-hierarchical networked knowledge	Hierarchical relationships among disciplines
Non-linear collective thought processes and explicit cybernetic loops	Lineal thought processes with few implicit cybernetic loops
Communication is for knowing with each other and for knowledge creation.	Communication is usually one-way traditional publications and presentations, where the purpose is to <i>transmit</i> knowledge previously obtained, not to create it.
Collaborative	Frequently based on individual (or small groups) thoughts to be transmitted or to oppose other thought
Finding common ground is usually the purpose.	Proving truth (or falsehood) in the context of a discipline is the usual purpose, which frequently is achieved via winning an argument.
Listening to the other side in order to understand, learn, find new meanings, agreements, and common ground to improve communication	Listening is usually for information apprehension and/or to identify flaws in order to counter-argument.
Extend and possibly changes a participant's point of view Debate affirms a participant's own point of view.	Points of views are contrasted and discussed in order to confirm or disconfirm them.
Participants assume that many people have different valid perspectives of reality and that together they can put them into a whole which would be a more adequate representation of reality.	Participants usually assume that there is one right perspective and that someone has it.

Copied from N. Callaos. 2011, Interdisciplinary Communications, <http://www.iiis.org/Nagib-Callaos/Interdisciplinary-communication>

Table 1

Conventional Conferences versus Conversational Format

	Conventional Conferences	Conversational Format
Input	Paper based on a solution or an answer , which will be presented by an individual (its author)	A problem or a question , which will be addressed by a group .
Output	Knowledge or information communication.	Sharing of Knowledge, reflections, ideas and opinions in multi-directional communication
Flow of Information	Basically unidirectional .	Multi-directional .
Sequence	Serial : one presentation after another, in a lineal format	Serial/Parallel : multiple short presentations by each individual interacting with similar shorts presentations of others in a non-lineal interchange of ideas
Cybernetic Loops	None or very low level of feedback in the small time period of questions/answers	High levels of feedback and feedforward loops in a highly interactive environment
Formal/Informal	Papers are presented in a formal environment and informal interaction is limited to coffee breaks.	More informal sharing of ideas and reflections with more possibilities of group creativity and ideas emergence Interaction during meeting
Creativity	Individual (or group creativity) previous to the meeting	Group creativity during the meeting nurturing and being nurtured by the individuals in the group in positive loops of feedbacks.
Order	Pre-established fixed order of papers presentations. Plan-based order.	Post-established, emergent and dynamic order. Rules-based order
Process	Systematic	Systemic
Implicit general Objective	Oriented to efficient knowledge or information communication	Oriented to effectiveness in knowledge communication, sharing of ideas and reflections, solving problems, answering questions, achieving consensual designs, etc.
Whole/Parts	The whole is basically equal (or sometimes even less) to the sum of its parts.	The whole is basically more to the sum of its parts.
Guiding Metaphor	Mechanism	Organism
Methodological and Epistemic Approach	Mostly, but not uniquely, oriented by Reductionism and Mechanicism	Oriented by the Systems Approach and its Pragmatic-Teleological epistemology and methodologies

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Table 2

The opposite features of both kinds of meeting do not make any of them better than the other in an absolute form. Each model has its own advantages and disadvantages and depending on the objective of the organizers any one of them might be more or less adequate. If an appropriate combination is made of both of them we might amplify the advantages of each model and diminish its disadvantages. With IIS as an organic unit and its co-located conferences, a model incorporating both the linear/logical and the parallel/synthetic aspects of communication can evolve further. Every participant in these conferences is invited to help in that evolution. To identify an adequate combination of intra and interdisciplinary modes, some tradeoffs should be made. These tradeoffs are, by their very nature, more subjective than objective, so they require subjects to do them with the objective of finding the most consensual one, and that consensus is organically through us.