CONTENTS:

Editor´s introduction  
Patricia E. Almaguer-Kalixto  2

Contents of RC51 participation in the XVIII ISA Congress of Sociology  
Chaime Marcuello Servós  3

2014 Conference highlights. RC51 (on Sociocybernetics) at the ISA Congress  
Bernard Scott  24

The Adventure of a Session at the Yokohama World Congress on: The Management of Complex Organizations and Firms  
Bernd Hornung  25

Walter Buckley Memorial Award for Excellence  
Laura GEMINI and Giovanni BOCCIAARTIERI  28

Journal of Sociocybernetics  
Michael Pateau  31

Board elections 2014  
Nominating Committee  33

IFSR and ISA Events information  34
Editor’s Introduction

Dear RC51 members,

Welcome to the RC51 Newsletter, Issue 29!

We report on the main activities of our Research Committee along this year. Most of it has been centred in our participation in the ISA Congress, Yokohama, July 11th-18th, 2014. Therefore we open our Newsletter with the program of the sessions and the abstracts of the papers presented at this grand event. I was reflecting for some time if the whole contents should be included or if we might only refer to the titles as most of the information is on the internet. However, I thought of two good reasons for including them here:

a) Although we tend to consider that information is “all there, somewhere”, our newsletter seeks to be the record of our activity, some sort of organized collective memory configured in one complex, unit of information. Yes, abstracts might be found in the future through web search engines or other tools, but to include them in the Newsletter, along with other texts that reflect on the process of presenting and discussing these works, may help a future observer to understand the sense and moment of the production of these ideas.

b) For those who did not have the chance to participate in the Conference, it gives the chance to know what the members of RC51, and other ISA participants attracted by sociocybernetics, are working (or reflecting) on. I think there are some very stimulating topics and research results that might provoke some further discussion.

We thank Bernard Scott for his contribution with an overview of the RC51 sessions and some personal reflections of the contents, as well as Bernd Hornung who shared The Adventure of a Session at the Yokohama World Congress on: The Management of Complex Organizations and Firms.

We report on the Walter Buckley Memorial Award for Excellence in presenting Sococybernetics, in the context of the Conference, this year granted to the presentation “Towards a Methodology of Visual Analysis on Twitter: the Earthquake in Northern Italy” by a research team from University of Urbino Carlos Bo. In the last part of the Newsletter you can find information about the Journal of Sociocybernetics, provided by Michael Paetou, (editor) and further information about the forthcoming 2014 RC51 board elections, our next conference and some activities organized by the IFSR and ISA.

Patricia E. Almaguer-Kalixto
RC51 Newsletter Editor
endev.research@gmail.com
Contents of RC51 Sessions

Chaime Marcuello (Universidad de Zaragoza)

Developments in Systems and/or Cybernetic Approaches: Asian and European and American Perspectives
Session Organizers: Eva BUCHINGER, Austrian Institute of Technology AIT, Austria and Czeslaw MESJASZ, Cracow University of Economics, Poland

Systems Thinking and Sociological Thinking: Observing from an Asian
Saburo AKAHORI, Tokyo Woman’s Christian University, Japan
In this paper we raise a question: How can we connect systems theory to sociology properly and effectively? In the process of answering this question, we will examine whether the Asian tradition can contribute to develop sociological systems theory or not. Generally speaking, systems theory offers us a tool to see things otherwise. Therefore it could be useful to develop sociological way of thinking. However, introducing systems theory to sociology is not an easy task. Here we regard it is because of so-called “epistemological obstacle” in western way of thinking. To overcome this difficulty, we have to get rid of the obstacle. It seems that non-western tradition does not have something new to develop systems theory itself. Rather, it could be bridge systems theory and sociology because systems theoretical perspectives are similar in some respects to the Asian traditional thought. In conclusion, beyond the distinction between western and non-western, systems theory could be a tool to think sociologically but it needs something that has bridging function between systems theory and sociology. Asian tradition could serve a role of bridging the gap between them.

The Foundation of a Theory of Everything
Arne KIELLMAN, Computer and Systems Sciences, Stockholm University and KTH, Stockholm University, Kista, Sweden
This paper discusses the basis of a recently developed “Theory of Everything” that builds on a “Subject-Oriented Approach to Knowing.” Its persistent claim is that physics and modern science by their reference to the “given”, most often explicated by the concept of “matter”, have led human thinking astray. This work shows that in the very moment a thinker/knower introduces “matter”, or the like, as something subject alien, he already in the outset introduces a crippling matter/mind distinction from which knowing never will recover. This contamination spreads to other men and their languages and conceptual frameworks, hence many of the perplexities and paradoxes found in modern science. On this view truth and falsity, right or wrong disappear, as well as the traditional role of science as a pursuit of truth. Along also goes the cleft between the social and natural sciences. This means that all knowledge endeavours can, pace Ernst Mach, be grouped under the same umbrella.

The idea of a common reality gives place to the idea of a private universe – a priverse – belonging to each and every man, and laboriously constructed on the basis of purely private experience. By his own will man builds this fund of cumulative experience in isolation or in a mood of communication and social consensus.
In the latter case, the tools of communication are also critically influenced by his choice of conceptual seed. On this view, the first hominid man was forced to construct a private language to connect to his children simply to break free from the isolation of his thoughts. Thus Adam was forced to build an emerging science strictly in a bootstrap manner. There is no other way to explain science and human knowledge - a recognition that has hitherto been hidden by a misunderstanding of the sign function.

The Complex Adaptive Systems Approach. a Sociocybernetic Reading
Alvaro MALAINA, Anthropology, University of California Berkeley, Berkeley, CA
Since the foundation of the Santa Fe Institute in the United States in 1984, and especially during the 90s, was formed a new wave in the science of complexity: the Complex Adaptive Systems (CAS) approach. CAS is based on modeling and simulation of complex systems using advanced computational techniques such as cellular automata or agent-based modeling. With an interdisciplinary and universal claim, its mainly methodological approach has dominated the scientific discourse around complexity. Numerous interdisciplinary complex adaptive systems centers have spread throughout the world, from United States to Europe, from Latin America to East Asia. We need a more reflexive and critical approaches to CAS, taking into account its epistemological limits. Sociocybernetics, through authors such as von Foerster, Varela, Maturana, Luhmann or Morin, is very useful here, because of its emphasis on the question of the observer/subject and its construction of the observed/object. Something that CAS models ignore, seeking to determine objectively and algorithmically probabilistic patterns in complex systems, without considering that system and complexity are primarily attributes of an observer, an operation of “punctuation” in his knowledge of the world. The simulated systems are doublely result of the intervention of the observer: the real system is an "invented reality" (von Foerster) and the system that simulates the real system would be doubly so. CAS epistemic limits become more evident in its sociological models called "Artificial Societies". The intervention of the modeler/observer here is even more evident in self-reflexive systems that are able to observe themselves, "self-referential" (Luhmann) systems of meaning in which both the constructed nature of the subjects themselves (Foucault) and the structures or social spaces of objective positions where the subjects are located (Bourdieu) cannot be ignored in favor of a mere behaviorist study of patterns of interaction among agents and their resulting and irreducible emergences.

A More Equal World: A Systemic Perspective to Think the Relation between Knowledge Construction and Cultural Management Development
Session Organizer: Margarita MAASS, Universidad Nacional Autónoma de México, Mexico

Cybercultur @ and Cultural Management For Development
Margarita MAASS, Universidad Nacional Autónoma de México, UNAM, México D.F., Mexico
México is a multicultural and mega-diverse country. With this richness and abundance in natural and cultural resources, Why Mexico is a country with a high index of poverty and low social development? How could we work in terms of community development? This paper focuses primarily on a proposal for the development of a thinking culture development as a large system formed by multiple sub-systems. We argue how Sociocybernetics let us understanding and explaining the culture as an ethno-ecosystem. In this proposal, Central System is the culture for development, and each sub-system is related and complemented with each other in building concrete procedures of observation and analysis units, as the elements of a larger system analyzed from a constructivist operational methodology. Specifically each subsystem may have different value and processing degree, and they are part of “culture for development” system. Each subsystem invites communities to making decisions and taking actions with a methodological model by the Sociocybernetics proposal and from a cybercultural perspective. Then, we explain how sociocybernetics allow us to construct a methodological proposal based on an Emerging Community of Local Knowledge system, CECL’s, in order to understand culture and development as an ethno-ecosystem; we explain how the ethno-ecological processes in a community are multidimensional and multi-relational processes. These processes permit the culture to appear as a fundamental component of a sustainable development.
Internalización y Externalización de Información desde el IEAI: Huella Significativa para el Aprendizaje Significativo

Santiago CHIO, Escuela de Artes Plásticas, Univeridad Autónoma de Coahuila, Saltillo, Coahuila, Mexico

En este trabajo, presento un producto (y medio para el fin) de la investigación sobre los usos inadecuados de las nuevas tecnologías para la educación por parte de un grupo multidisciplinario de catedráticos de en un programa de posgrado a distancia de la Universidad Autónoma de Coahuila. Así como un problema complejo requiere de la investigación interdisciplinaría, las causas que lo originan requieren de un instrumento que muestre las relaciones y sus efectos emergentes. El IEAI es una base de datos que a manera de observatorio, nos ofrece una “Huella Significativa” porque está construida y relacionada con: La Epistemología Genética.- Nos ayuda a explicar y explicarnos la construcción y el desarrollo de los procesos cognoscitivos en una representación externa. Sistemas Complejos.- Es un conjunto de elementos / relaciones heterogéneos e interdefinidos que se comportan como una totalidad relativa. Cibercultur@.- Está completamente dedicado al cultivo de tres culturas potenciadas por TICC: Cultura de Información, Cultura de Conocimiento y Cultura de Comunicación. Sociocibernética.- Es un objeto de estudio que propicia la auto organización de quienes lo integran. Investigación Interdisciplinaria.- Está constituido por elementos multidisciplinarios que interactúan en prácticas de integración/diferenciación en una constante sincronización dialéctica. Se suman otros cuerpos teóricos para conformar las “Fases Dinámicas Solidarias”, estos son: Lev Vygotsky con el Objeto Mediator y Zona de Desarrollo Próximo, Engeström con la Teoría de la Actividad Ampliada y Ausubel con el Aprendizaje Significativo. Esto, nos permite explicar y justificar el sistema que nos deja ver representado el cómo aprendemos, como enseñamos para vivir en comunidad. Este sistema, permite que lo capturado en fríos formatos de rutina, sea procesado sistémicamente por la Cibercultur@, para que sea posible observarlo desde la Sociocibernética, procurando siempre la interacción de las ciencias, las culturas y las tecnologías.

Functional Differentiation and Communication Problems

Elíana HERRERA-VEGA, Communication Department, University of Ottawa, Ottawa, Canada

This research deals with the necessity of a transformation of the dominant paradigm for observing society. It builds from N. Luhmann theory of social systems. The problem is dealt with using cybernetic theories of social communication that are used to advance selected case analyses. I first deal with the fragmented state of scientific production, which I explain as a side-result of functional differentiation. I describe this as a case of incomplete rationality that has consequences for the level of human agents and for the level of systems’ communications. I then postulate that structural changes force any serious social epistemology to include the notion of functional differentiation, in order to account for newer epistemic forms of agency such as organizations that exist at a level of praxeological equality with human beings.

The situation of newer epistemic forms has profound consequences for all the concerned levels. On the one hand, in respect to the level of direct human agency, the fact of emergent modalities of agents forces a reconsideration of the romanticised perspectives of agency (Collins, 1992). Anthropic perspectives are refuted by those newer epistemic forms, jeopardizing the former centrality of the human subject in the making of society. On the other hand, in respect to the side of techno-systems and their increasing reflexive features, a reconsideration of traditional concepts of cognition is urgent. Understanding emergence takes then a central role. The implications of my research are 1. A decentring of the anthropic perspective to understanding complex social communication. 2. A revision of determinist views to ascertain conflicts in social systems’ communications. 3. My research offers a practical approach to maximize the possibilities that direct human agency has to circumvent stabilized communications in social systems. Finally, the piece offers new venues to understand the relationship between human agency and systemic stability.

Strategic Management Model for Effective and Efficient Operationalization Educational Models in Higher Education

Blanca Eva GONZÁLEZ MONROY, Instituto Tecnológico de Atitalaquia, México, Atitalaquia, 42970

Systemic perspective: Interdisciplinary knowledge and cultural management development. Two years ago I was in XVII ISA World Congress of Sociology, in Buenos Aires, Argentina. In that moment, I introduced, “AN EDUCATIONAL MODEL” Analyzed from the interdisciplinary research. Well, now that work has finished, I
introduce you a proposal as result of that research. No, only in México, the news in all the world say, “results in education are problem” in higher education exist research professors. Why, then, there are not links between research groups and public actors? This proposal, show a new form of work, is a form where all actors of an Education Institution should be involved in the work, since systemic perspective. In a synergies constant, where my work and your work are equally important, where all areas are equally important, because are elements of live system. In Mexico Educational Models in higher education has considering a guide to educational process but, don’t operating, because people don’t know the model, only have a causal perspective, because the model not is a piece of themselves. The proposal considered a systemic perspective of work, with support of the theoretical construction: Current teaching/learning, Management by projects, Strategic Management, and Epistemological Stance: Systems Theory / Rolando García (2006), Genetic Epistemology Rolando García (2000), Interdisciplinary Working Rolando García (2006) Cybercultur@ y Sociocybernetics (Maass, Amozurrutia, Almaguer, González & Meza, 2012) In this perspective the actors are the system environment, are structural coupling, and is describes step by step the methodology that will lead to the operation of educational model. I hope this proposal will be a contribution to the higher education in México, because a quality education no is a dream is a reality, but, is necessary an interdisciplinary work between public actors and research groups.

Recalibrating the Social
Session Organizer: Saburo AKAHORI, Tokyo Woman’s Christian University, Japan

Paradigms Of The Social: Current Vis à Vis An Alternative
Roberto MANCILLA, UC Berkeley School of Law, Berkeley, CA
The idea of the “social” is the foundational paradigm of sociology, one which has been stated, understood and restated several times through its story. In the realm of Sociocybernetics Niklas Luhmann’s social systems theory defines them as based on communication, with society being the most encompassing form. To this author human beings don’t and can’t communicate, only communication can do so, this means that society has to be described on the basis of events. Social systems are autoepoietic because they produce their own components and their growth can be explained on terms with second order cybernetics; unlike living systems, which are closed, social systems are cognitively open and operationally closed. This posthuman theory of social systems has been widely discussed and some of its criticisms are that it ignores the law of requisite variety (as it only understands the reduction of complexity), empirical evidence that social systems are indeed open, and the fact that it does not comprehend human behavior in micro scale.

The purpose of my participation is to expound the merits of Luhmann’s theory, to criticize it and to propose a new approach to social systems. As first order cybernetics deals with observed systems which are teleological and second with observing, which are teleonomical; a third order of cybernetics studies mutually observing systems and are teleological and teleonomical at the same time. A fourth order of cybernetics can also be expounded as the realm of human cognitive systems, which are self-observing systems and have the features of both first and second systems. Third cybernetics has language as a basis, while fourth has cognitive coherence; social cybernetics can be understood as the interplay of third and fourth order cybernetics.

The Death or the Reinventing of the Social?: A System-Theoretical Contribution to Changing the Semantics of Inclusion and Exclusion in Activation Welfare Strategies
Tomoko WATARAI, Yokohama City University, Yokohama, Japan
This paper addresses the question of how the landscape of inclusion and exclusion can be recast in the light of Luhmann’s systems theory by referring to narrative interviews with local actors from migrant support organizations. The ongoing discussions about social inclusion and exclusion, which are mainly conducted in socio-political studies on poverty and inequality, represent a normative understanding of “the social” that is reflected in the notion of solidarity, social policy, and welfare state. On the contrary, Luhmann’s systems theory concerns another tradition of “the social” i.e., the tradition of social action, interaction, and communication in a particular way. According to his definition of inclusion/exclusion, neither membership
in the legal rights nor a status in the central labor market is crucial; only communicational relevance matters. Taking this definition seriously, even a bankrupt or jobless person is economically “included” insofar as (s)he is communicatively relevant in the economic system, which finally leads us to the conclusion that there is no “social exclusion” in the “social systems.”

Applying the systems theoretical understanding of inclusion/exclusion, this paper assesses how the communicational form of migrant support organizations is changing because of a radical shift in the activation policy of the last decade in Germany. The range of political reforms is generally considered a symbolic move to a neo-liberal arrangement of the welfare state, which would be comparable to the diagnosis of “the death of the social” (N. Rose 1996). This paper presents another scenario by highlighting that operational sensitivity is increasingly enhanced in local welfare organizations; this enhancement is meant to deal with the highly complex demands of individual clients and to ensure their cooperative engagement. Finally, it calls for “reinventing the social” (S. Lessenich 2008), particularly by aiming at a constructive contribution to link the very different assumptions of the social.

How Can Social Systems Observe?: Toward an Elaboration of Sociological Systems Theory
Saburo AKAHORI, Tokyo Woman’s Christian University, Japan

Nonetheless the term “social system” has been a typical technical term of sociology, it has not been understood properly even in the circle of sociologists. For example, usually we cannot distinguish between social systems and societal system(s). This paper explores what kind of upgrade is needed to elaborate the concept of social systems in the context of sociology with reference to the rise of social media.

There are several reasons why the concept of “system” is introduced in sociology. Among them, we pay attention to the definition of social system as an observer, or the definition of the social as an observing system, in Niklas Luhmann’s theory. Even though the definition of the system as an observer is not derived from the tradition of sociology, we can safely say that it is sociologically important because the expression “social systems observe” is almost equivalent to the frequently used expression “realities are socially constructed”. By using systems approach, we will be able to define precisely what is meant by the term “social” in such context. In Luhmann’s theory the component of social systems is not defined as action, but as communication or communicative event. However we consider the definition of observation, the unity of distinction and indication, is not satisfactory to define social system (i.e. system of communicative elements) as a particular kind of observer. We insist that the definition of social systems should imply duration or continuity of observation as with the other observing systems. At last we conclude that, especially in the era of social media, we should distinguish between “the social (i.e. communication) as an element of social systems” and “social systems (i.e. system of communicative elements)”.

Gender Based Violence and Interpersonal Violence As a Complex Issue
Session Organizers: Manuel LISBOA, Universidade Nova de Lisboa, Portugal, Dalila CEREJO, Universidade Nova de Lisboa, Portugal and Santiago BOIRA SARTO, Universidad de Zaragoza, Spain

Violence Against Women and Femicide: Sociocybernetic Approach
Santiago BOIRA SARTO, Universidad de Zaragoza, Spain
Juan Manuel Iranzo IRANZO, Sociologist, Spain

In spite of the existence of significant regional differences, gender and domestic violence data (including psychological abuse, physical assaults and femicide) are so regular and stable that the phenomenon can be considered ‘structural’ and "systemic". First of all, we should admit that conflicts of interests, a frequent ‘cero-sum game situation frame, structural conditions of stress and imbalance of physical, economic, and/or symbolic power, inadequate emotional and cultural resources to deal with conflict, and inappropriate ‘scripts’ for communication and other forms of face-to-face interaction make intimate partnership a context prone to conflict breeding ‘accidental’ violence. This paper presents, we present the first steps of our research program is the design of sociocybernetic model. It gathers all relevant variables at all three structural levels, weighted by their predictive power according to path-analyses. Conflicts are frequent in intimate partner life, but it is only a precondition of violence. Violence and femicide are the result of...
personal, micro-social and socio-structural and cultural variables that, in some triggering circumstances, get aligned and form a ‘trajectory of accident’ from aggressor to victim. This vision shows that true severe violence results from a continuous story of abusive ritual interaction oriented to establish and preserve a position of domination and control. More research at micro-sociological level is needed to identify really predictive variables. Path-analysis to weight them a sociocybernetic can help to build explicative-predictive models that could help to design better preventive public policies. This research could also help to move farther away from former ‘pathological culture’ and present ‘burocratic culture’ on intimate-partner gender violence towards a ‘generative culture’ able to foster a social ‘cycle of learning’ among all participants, from couple members through lawyers, psychologists and public officers, to all members of society.

Risk Assessment in Men Convicted of Intimate Partner Violence. The Adaptive System Data Integration (ASDI)
Jose A. AMOZURRUTIA , Interdisciplinary Research, Universidad Autonoma de Mexico, Mexico D. F., Mexico, Maria DEL CASTILLO , Instituto Aragonés de la Mujer, Spain
In any society, violent phenomena occur and they always build a complex situation whose study involves considering different perspectives. Inside a relationship, violence against women is a good example. In this context, the analysis of the victim risk is crucial and being a major challenge for researchers. This paper presents the Adaptive System Data Integration (ASDI). This system is an analysis tool to organize and analyze qualitative and quantitative information (Amozurrutia, & Marcuello, 2011). The ASDI is based on a model that allows continuous updating of their evaluation criteria. Using this method it possible to link two or more observables data for integration into categories and their representation synchronic and diachronic as text. In this research, we study a sample of 45 convicted male batterers who participated in a psychological intervention program. The (ASDI) performs a risk assessment from nine variables that collect information from scales: Buss-Perry Aggression Questionnaire, Inventory of Ambivalent Sexism and Attribution of Responsibility Scale (Minimization Subscale). Also we get information of initial interview to offender -before starting the treatment- and the therapist who performs the procedure. The scores are compared with the Spousal Assault Risk Assessment Guide (SARA) and the therapist's assessment done at the end of treatment. The results show statistically significant correlations between the ASDI and the therapist assessment but no with SARA scores.

Domestic Violence As Eigenvalue in Contemporary Society: A Sociocybernetic Approach to the Construction of a Form of Gender Based Violence in Chile
Fernando A. VALENZUELA , School of Sociology, Universidad Andres Bello, Viña del Mar, Chile
Domestic violence, including several forms of gender based violence, does not exist independently from an observer, neither is this observer limited to a domestic realm. In contemporary society, domestic violence is constructed as such in a network of operations that encompasses both private and public realms. This network involves a diversity of human and non-human agents – questionnaires, photographs, medical instruments, etc. – and coordinates public policy, legal, scientific and political criteria. As a result of these operations, experiences of violence are transformed into cases of domestic violence, which overflow into courtrooms, state agencies and other sites. In this sense, domestic violence is an Eigenvalue (Heinz von Foerster), a referential correlate of this complex network of operations. This paper, which is based on field observations made in Santiago, Chile, describes a section of this network: the section that goes from the moment a report is made to the moment it enters a courtroom transformed into a case of domestic violence. It is stated that three problems of reference (Niklas Luhmann) give meaning to the diverse operations that are involved in this network: a) the attribution of cases of violence to the environment of the system; b) their observation as forms against a medium; c) and the constitution of chains of transformations (Bruno Latour) through which references to the lived experiences of violence are mobilized into the courtroom. Specific mechanisms that contribute to solve these problems are presented and analyzed. Finally, two main consequences are explored. At the same time that the constructed reality of domestic violence becomes inscribed in the lives of victims and their relatives, shaping their experiences and descriptions of the world, it is shaped as a stream of facts that feed state mechanisms of population control.
Spreadsheet Model for Complex Variable Integration: A Sociocybernetic Approach to the Emotional Component in Violent Actors Interviews
Jose A. AMOZURRUTIA, Interdisciplinary Research, Universidad Autonoma de Mexico, Mexico D. F., Mexico
Sociocybernetic perspective tries to adapt available cybernetic strategies and conceptual resources to problem solution through a heuristic approach (Geyer, 1995). In the case of capricious observable conditions in social analysis there are situations in which empirical information present irregularities difficult to overcome. On the one hand difficulties begin with incomplete information in an observation unit missing several dependent variables (Ibáñez, 1994). In the other hand, there are unstable and very significant emotions behavior that may alter the explicit observables attributes. (Guba y Lincoln, 1994) Incomplete information in first order techniques present a headache from statistics perspective. It is not possible to accept an observation unit with two or more data missing (Padua, 1982). In second order techniques like discourse analysis the number of observations associated with several paragraphs may not allow an integration of variables into categories for analysis inference (Ibáñez, 1994). Although intelligent analysis may be done out of theoretical principles i.e. that of size definition of samples in statistics or the necessary existence of all variables needed for category integration, in both cases there is not enough theoretical criteria to make it rationally valid. Emotional issues in violence situations are strongly difficult to record and evaluate. One strategy is to make analogies between real violent moments with post-violence narrations. Text analysis with implicit emotionality contents modifies descriptions, judgments and assessments. Logic in the algorithms that emulate the valuations of these conducts should include the non linear behaviour. In this paper I present an algorithm that proposes a better alternative to resolve the above cases just referred and the inclusion of emotional behavior. It is implemented in a Spreadsheet language that configures an application for social analysis. The model is applied to a real case involved in interviews of violence actors.

Sociocybernetics of Innovation: Drivers, Barriers and Stabilizers of Innovation in Different Theoretical Contexts
Session Organizers: Eva BUCHINGER, Austrian Institute of Technology AIT, Austria and Czeslaw MESJASZ, Cracow University of Economics, Poland

Variety and Emergence in Complex Environments: The Role of Innovation in Organizational Competitiveness
Alejandro BARRAGAN OCANA, Universidad Nacional Autónoma de México, Mexico; José Julio NARES HERNÁNDEZ, Autonomous University of State of Mexico, Mexico; Samuel OLMOS PEÑA, Autonomous University of State of Mexico, Mexico; Gerardo REYES RUIZ, N/A, Mexico.
Nowadays, the advancement of global society and economy along with the rapid growth of Information Technology and Communication (ICT) have created significant challenges for those companies, who pursed both their permanence and their development in the markets where they compete. Thus, enterprises have responded with the adoption and / or generation of innovation mechanisms to maintain or improving their competitiveness. Firms have understood that intellectual capital is a mechanism to add a value to their processes, products or services that they offer to their clients, therefore to maintain their competitiveness advantages that help them to have a better position before their markets. The aim of this work is to generate a first approach, essentially theoretical in nature, that when seen from complex systems, help to characterize the complexity of this environment and to understand how companies have developed a variety of known responses to everyday problems. Moreover, creating emerging nature mechanisms that have served them to generate responses, which have helped them to successfully face the challenges of innovation that the market required in order to maintain its competitiveness.
Emergent Innovation - Towards a Complexity Theory of Innovation Research and Management
Erik LINDBULT, Mälardalen University, Sweden; James HAZY, Adelphi University, USA
During the last decades, there has been a broadening of the field of innovation management. Models of innovation have moved from simple linear models towards increasingly complex interactive models (Rothwell, 1992, Lundvall, 1994, Chesbrough, 2003). Innovation management is moving from an expert function organized in R&D units towards an integration of technological, market, organizational and institutional dimensions (Tidd, Bessant&Pavitt, 2001) implying a need for broad interaction of a multiple of actors (van der Ven, et.al., 1989, Sawyer, 2005). Innovation is recognized as complex self-adaptive systems with a need to involve not only all members of organizations but also external partners, customers and other agents in the ecology. Based on these developments the paper aims to clarify emergent innovation as a novel paradigm. It is a perspective that describes innovation as something that is continuous (Burnes, 2009, Weick&Quinn, 1999), can emerge everywhere, and wherein anyone can become an innovator. Novelty is understood as emerging through fine-grained human interaction in interaction with containing coarse-grained structures (Gell-Mann, 2002, Hazy&Ashley, 2011) in what Stacey, et.al. (2000) call complex responsive processes. The ways in which human interaction dynamics generate emergent innovative structures can be clarified using complex systems models that include nonlinear interactions and processes. Skeptical and pragmatic epistemology can illuminate the way knowledge and cognition is situated in concrete physical, social and cultural environments and innovation is emerging in spaces from within this ecology (Peschl&Fundneider, 2008). Continuous self-organizing by multiple agents driving innovation need to be accompanied with complexity oriented leadership (Goldstein, Hazy & Lichtenstein, 2010) providing enabling structures from an eco-organizational perspective. We propose a complex system model of organizing emergent innovation.

Observing Social Systems in the Era of Big Data. Part I
Session Organizer: Fabio GIGLIETTO University of Urbino, Italy; Elena Esposito, University of Modena, Italy

Towards a Methodology of Visual Analysis on Twitter. the Earthquake in Northern Italy
Laura GEMINI, University of Urbino Carlo Bo, Italy; Giovanni BOCCIA ARTIERI, University of Urbino Carlo Bo, Italy; Elisabetta ZUROVAC, University of Urbino Carlo Bo, Italy; Manolo FARCI, University of Urbino Carlo Bo, Italy
The catastrophic event represents a relevant and interesting place of observation of communication practices and narration strategies started by media.
Traditional media represent the catastrophe with almost known strategies – both in the entertainment frame and in order to fulfill their informative role using precise selective criteria – otherwise social media have to be considered as different, if not new, contests of production and circulation of the catastrophic imagery. It is sure that in this cases visual communication – in other words the production, diffusion and usage of images – has a central role for the symbolic handling of the natural determinism (Durkheim). From these assumptions, the paper presents the results of a research conducted on a sample of 4257 images uploaded on Twitter during the first day of the earthquake that happened in northern Italy May 20, 2012. On the basis of this analysis, it is proposed a typology of images to sustain a first and general work hypothesis finding that during catastrophic events, the image has not only a re-fero function as an evidence of the ambient trauma, nor just a re-ligo function as social sharing of drama. The images shared on social networks are answering to the need of reprocessing in a symbolic way the catastrophic trauma, transforming it into an efficient occasion to activate new rituals of socialization and collective sharing. This research focuses on Twitter peculiarity – as a primarily textual medium and characterized by precise connection dynamics between the users – to detect, by the application of the Social Network Analysis, the weight of the circulation of some influential images in order to spot the iconic images and to describe the social networks which explain their emersion and circulation.
What Is Social about the Network?: An Analysis of the Application Program Interfaces of Popular Websites
Ashwin NAGAPPA, Tata Institute of Social Sciences, India; Alpesh GAJBE, Tata Institute of Social Sciences, India; Faebitha RAHIMAN, Tata Institute of Social Sciences, India
API (Application Program Interface) is the method of continuous asynchronous sourcing of data between various ‘applications’. It facilitates exchange of data between nodes in a ‘network’. By examining at the nature of the data extracted by the API and its use of the data in defining the utility of the ‘application’ we can produce a critical appraisal of the nature of the techno-social interaction afforded by the ‘networked’/‘networking’ society. The promise of communications technology among other things is the democracy and the user defined nature of interaction of players constituted by it. But the use of ‘bubble’ (Pariser, 2011) produced in the human-computer interaction to fashion online activities alerts us to a bias in the nature of such interactions while enforcement of technologies like unique identity based governance systems further complicates the digital divide bringing up the question of equality. This paper is based on the analysis of API codes and its mechanisms, offered by Google, Facebook, Twitter and YouTube. The analysis looks into the nature of the ‘bubble’ generated in order to define the character of the network. This is in a bid to argue that the randomness promised by it is being reined in order to create patterns of interaction that are arbitrary and unequal compounding the problems experienced in infrastructural access and the lack of ‘cultural’ capital. Technology is best analysed in technological terms in order to arrive at an understanding of its sociological dimensions. Such orientation is politically necessary to make apparent the the hardwiring of inequality in the era of big data.

Observing Social Systems in the Era of Big Data (Part II)
Session Organizer: Fabio GIGLIETTO University of Urbino, Italy; Elena Esposito, University of Modena, Italy

Connected Audiences of Politics: Analyzing Twitter Conversation on Beppe Grillo and Five Star Movement Generated during Political TV Talk-Shows
Fabio GIGLIETTO, Communication Studies & Humanities, University of Urbino Carlo Bo, Urbino, Italy. Laura IANNELLI, Political Sciences, Communication Sciences and Information Engineering, University of Sassari, Sassari, Italy
In the last two decades, characterized by an increasing crisis of traditional forms of politics, talk-shows have placed interesting challenges to the research on contemporary political communication and participation forms. Scholars of the “third age of political communication” have studied the cognitive, evaluative, affective effects of this mix of entertainment and information on the citizens/spectators. Recent analysis considered the increasing symbiotic relationship between political talk-shows and Twitter, by studying the “second-screen” practices in terms of audience participation to the construction of the public debate. Referring to this approach, our study analyzed Twitter connected audiences of all the Italian political talk-shows (1,077 episodes) on air from September 2012 to April 2013. This period covers significant political events related to the 2013 Italian General Election (24th and 25th February), from the electoral campaign to the Five Star Movement’s electoral achievement, and its institutional consequences. We aimed to understand: how much do “connected audience” of political talk-shows discuss on Twitter around M5S, in the different phases of the “permanent” electoral campaign (RQ1); Is the presence of M5S, Grillo and other representatives as a topic of conversation on Twitter correlated with specific characteristics of the aired episodes (talk-show, audience, phases of the campaign, issues)? (RQ2). While significantly less frequent than conversations mentioning the right and left coalition, Tweets around M5S were present during the three phases of the campaign. Furthermore, the analysis identified significant amounts of Twitter discussions around M5S generated during the episodes dedicated to specific issues (political backstage, polemics, strategies of the M5S, scandals, anti-politics).
System Theory, Computational Social Science and the Challenges of Zettabyte Era
Ronaldo BAL TAR , Ciências Sociais, Universidade Estadual de Londrina, Londrina/PR, Brazil
Cláudia BAL TAR , Demografia, Universidade Estadual de Londrina, 4330242975, Brazil

The volume of information available for research has grown rapidly in recent decades. According to the Cisco Systems, we are beginning the era of Zettabyte. The access and analytical treatment of this enormous amount of information have created a debate in social sciences about new methods, epistemological and theoretical conceptions. This study is based on systems theory, sociocybernetics and new propositions of the computational social science. Four concepts connect the areas of knowledge involved in this project: system, complexity, emergence and evolution. The fundamental premise to make sense of the data is that a social organization evolves or transform over time. Data can be conceived as a registry of how systems are organized and how it changes over time. In the classical sociology, the same idea constitutes the fundamental concept of the social process, which can be identified through social patterns. It means that social phenomena emerge from social relations, even if individuals are rational agents of these changes. The methodological challenge consists in observing and selecting data to reveal patterns of social relations and unravel the interconnection between the components of a system. The intention is to understand emergence of social phenomena (migration, inequality, etc.) and the consequent change in the social system. This study, conduct by the Laboratory of computational sociology (Infosoc - UEL), has approached agent-based simulations in comparison with observed data from social networks. The first conclusions are the volume of data is less significant than the analytical capacity to select specific data in order to identify social interconnections and find patterns of systems complexity.

Big Data: Te Concept in the Next Society
Wei-Hsin HSIAO , Fakultät für Kulturreflexion, Universitaet Witten/Herdecke, Witten, Germany

In our society, each social phenomenon leans on every new concept to clarify. Concept of "Big Data" reveals the novel route to further illustrate our society. Confronting endless possibility in the society nowadays, connection produces innumerable different situation since they are highly correlated. These variable contexts currently become a huge complexity than within the modern society in the sense of Niklas Luhmann. Therefore, the aim of next society is finding a way to construct the order of the system (in the sense of Dirk Baecker), not reducing the complexity instead. Facebook demonstrated a solution, which has been developed by the society. By algorithmic programming in Facebook, each loose coupling (uncertainties) click of the user is now referring to different distinction and building up the boundary of meaning. Every time user clicks “like” on status that it means he understands something. Following understanding and meaning, the uncertain state will soon transform into certainty, namely stable state or the order. Thus, using the endless uncertainty is possible to construct the order or coexist with other systems. The novelty of "Big Data" isn’t itself but clarify the targeted question. The paper illustrated how Facebook reveals the solution to the problem of the next society, computer society, as Dirk Baecker said.

Social Networks, Digital Generation and Democratization Processes

Cyberspace: A New "Fieldwork" Experience For Sociologists
Hugo LOISEAU , Université de Sherbrooke, Sherbrooke, QC, Canada

While cyberspace clearly is a new research field, scholars are just starting to study how to grasp the full meaning of social relations in cyberspace. This question puzzles numerous disciplines of social sciences. Traditionally, the explanation of the process of research means that researchers have to go back and forth between the theoretical perspective and the empirical reality. They essentially start from one of these two starting points to get towards the other. But how to do that in the digital world? This space shares characteristics of both theoretical and empirical worlds, but nevertheless, differs greatly from both. The paper proposes a transformation of the tools and concepts used in social research to properly use cyberspace as a tool of investigation and analysis in social research. To do this, the paper addresses a
shortcoming found in the literature i.e. the lack of a clear definition of the concept of fieldwork in social sciences. Thus, the paper exposes three main reasons why and how cyberspace should be designed as a field of investigation: 1) because it is a place (cyberspace is a space in the geographical sense), 2) there are several methods to do research in cyberspace and 3) there is an ethic of research inherent to it. We therefore believe it is possible to say that cyberspace is not a field like any other. It is rather a new mediator between theory and reality. A better understanding of this cyberspace field should provide better tools and concepts to apprehend the social reality in the digital world. The originality of the paper is based on the current inability of different research methods to understand and analyze cyberspace as a research object but also on their inability to understand and properly analyze the social phenomenon of cyberspace.

Openness, Transparency and Traceability of Public Policies
Chaime MARCUELLO-SERVOS, Universidad de Zaragoza, Spain

The meaning of transparency is seemingly obvious and simple, however, in political terms transparency is more “the condition of being transparent”. It arises in opposition to corruption, secrecy and lack of clarity in the management of organizations and institutions. Today, it is more relevant than ever as a consequence of all kinds of recent scandals. Citizens of democratic societies demand a more open and transparent government. This requisite of transparency is a political goal, which is supported by the possibilities for openness produced by the microelectronics revolution. This has modified the technological, social and political scenarios. It is more than the Internet; it is creating the global ICTs system where available information is increasing daily, as are the possibilities of accessing and processing data. In this context this paper proposes, first, an analysis of public policies according to the principle of traceability of decisions. This means that it is possible to identify the full cycle of a public policy and its relationship with the different actors involved in the policymaking process. Second, imitating food processing traceability tools, it is possible to propose a “policies processing software” for recording all the traces of public decisions and an open system to retrieve and access this data. Third, it describes the theoretical conditions and prerequisites for a “barcode” to reveal who proposed an action and how it was designed, implemented and evaluated.

Open Systems, Open Data, Open Government
Session Organizer: Chaime MARCUELLO-SERVOS, Universidad de Zaragoza, Spain

Social Media, Open Government and "Liquid Democracy"
Michael PAETAU, Center for Sociocybernetics Studies Bonn, Germany

More than 10 years ago André Gorz argued that the use of the term »knowledge society« would only make sense if one were able to demonstrate that relevant radical changes in society somehow related to changes in the handling of knowledge in society. Such a demonstration concentrated on the area of democracy will be the object of my contribution. In my paper I want to unfold the thesis, that the present form of giving people more participation within political processes and providing more insights into documents of governance is an intermediate step to change western style of democracy fundamentally. I want to focus the question how new media, especially so-called »social media«, may overcome the traditional dichotomy between parliamentary representative democratic tradition and grassroots oriented plebiscitary democratic elements. Since some years this question has been primarily debated under the term of »Liquid Democracy«. It stands for the idea to make democracy more liquid, more transparent and more flexible. People should have the opportunity to participate in political affairs complementary to delegating the powers of the sovereignty to a body of human elected from time to time for four or five years. "Liquid Democracy" will give people the possibility to campaign effectively and collaboratively for the issues they are concerned about. The paper will show which social, political and technological concepts for such a liquid democracy exist. Which discourses in different areas and scientific disciplines occur, and which experiences and evaluations are available. Literature: Paetau, Michael: Kybernetik und flüssige Demokratie. In: Kahrs, H. (Hg.): Piratenzauber. Über eine Gesellschaft, die Freibeuter hervorbringt. Köln 2013: PapyRossa, S. 173-187
Public Communication in the Processes of Transparency and Accountability in the Era of Open Data

Gea DUCCI, Department of Communication Sciences and Humanities, University of Urbino Carlo Bo, Urbino, Italy

Transparency and accountability in the public sector are currently at the center of the communication policies by public administrations in different institutional contexts. With the development of ICT and the prospective of open data and open government that invests in recent years the renewal of the public system in various countries and supranational realities (such as Europe), accountability seems to find new impulse. Public institutions tend to make available to the public information concerning the processes of administration, the manner of use of public goods and resources. At the same time, in the Network Society (Castells 2008, Jenkins 2006) each institution is called upon to deal with the demand for transparency and participation of citizens, which use for this purpose increasingly the Internet and social media (new forms of civic engagement) (Castells 2010 to 2012, Dahlgren 2010). Observing the ways in which public authorities are transitioning towards open data (through the analysis of significant cases at the level of local and national governments) emerge strengths and weaknesses, including a problem of attribution of sense to produced data, at the macro level (institutions) and the micro level (individual and associated citizens). Public communication plays a crucial role because it can accompany open government, through a contextualization and adequate communication of the data that goes beyond the mere publication. This effort, associated with the ability of individual and associated citizens to practice a selection of data, it is possible the emergence of the construction of sense that it favors the desired micro-macro link (Ardigò 1998, Mazzoli 2001, 2012), the possible compatibilization between macro-systems and environment, life-worlds.

Open Your Own Data - Creating Individual High Value for Little People from Big Data

Karsten Boye RASMUSSEN, University of Southern Denmark, Odense, Denmark
Heiko THIMM, Pforzheim University, Pforzheim, Germany

The Open Data movement signifies availability and access to data as a prerequisite for the exercise of individual democratic rights. Data are now Big Data with large numbers of attributes, transactions, relationships, complexities, and individuals. Government data are typically viewed as aggregate data. However, plenty of examples show that your individual data is required for the administration and planning of your tax, your pension, your health etc. Individuals using electronic devices and applications leave electronic traces. When using the World Wide Web, your phone, or applications you leave traces. Data in the form of electronic traces are also fruitful for commercial companies because profiling based upon the detailed registration of individual behaviour can be used to target the right product or service to the right customer. Profiling can remarkably improve the success of invitations from a company to individuals. Seemingly, the individual also benefits by only being disturbed by offers containing more relevant information. The issue of privacy and confidentiality is discussed and high-level precautions are implemented in order not to disclose individual data to a third party. However, the individual data should be available to the individual. To open and own your own data should be the general rule in all areas. Big Data implies an information asymmetry that disfavours the individual. When individual data are not available to the individual, the individual's decision making is based on insufficient data. As an example your phone company knows precisely your behaviour regarding phone conversations, text messages, and data traffic. If you had your individual data - "know yourself" - you could generate more individual value when approaching a competing phone company. With full availability of individual data and development of capable software applications and agents the individual can gain the rightful ownership and effectively act in the individual's own interest.
Social Objects As Tokens for Social Eigen-Behaviors
Pablo NAVARRO, University of Valencia, Spain
This paper puts forward the concept of ‘Social Object’. A ‘Social Object’ would be a sort of imaginary hanger (or better, an imaginary hanger shared by a community of social individuals) which works as a referent consistently targeted by a particular family of social actions and interactions. This set is somewhat fuzzy, and it would be made up by the actions and interactions that satisfy—to some acceptable degree—such social object. For instance, the social object we call ‘greeting’ would be the ‘hanger’ or ‘imaginary shared referent’ of the (fuzzy) set of actions and interactions which satisfy that specific object (namely, which accomplish an acceptable greeting) in a given situation. That set of actions and interactions would include those solving (accomplishing) the act of greeting in that situation, and would exclude those failing to do so.
In other words, a social object would be the ontological assumption that enables and orients our interactive success (or our interactive failure, in case we misfire and act in a way unacceptable for our interactive partners). This notion of ‘Social Object’ is cognate to the conception of physical objects as “tokens for (eigen-)behaviors”, put forward by Heinz von Foerster. From this viewpoint, objects are not realities independent from our actions, but assumptions that guide the cognitive and practical processes of the subject—a subject who “constructs” such objects through his actions. Different types of societies are structured by means of different kinds of social objects. And the sort of social objects that are emerging as typical of today’s global society are Social World-Objects (namely, social objects which define their dynamics as unitary systems on a global scale). Many of those Social World-Objects are being generated within and by the Internet.

The Coordination Mechanisms of Organizational Routines: A Case Study on a Free/Open Source Software Project
Marco TONELLATO, Tepper School of Business, Carnegie Mellon University, Pittsburgh, PA
Guido CONALDI, University of Greenwich, United Kingdom
How might distributed, peer-production organizations that rely on the Open Innovation paradigm sustain task specialization and achieve effective coordination in the absence of formal hierarchical control? This question is increasingly relevant because a number of productions processes are being shifted from the physical to the virtual domain. Traditionally, scholars identified in organizational routines the building blocks of coordinated action in organizations. In this paper, we draw on the evolutionary perspective of organizational change (Nelson and Winter, 1982) to investigate the emergence and change of organizational routines in the context of distributed, peer-production communities. We argue that change emerges endogenously from routines - which we define as ordered sequences of actions linking problem-solvers and problems within organizations. More specifically, we investigate how routines emerge dynamically from the dual association connecting individuals (or “problem-solvers”) and tasks (or “problems”) in organizations. In particular, we ask: How do organizational routines (structured sequences of actions) emerge, evolve and persist despite the demographic turnover of participants and the ever changing character of organizational problems?
To answer this question we run newly developed class of Relational Event Models on the entire sequence of actions undertaken by software contributors on software bugs during the entire lifetime of the Apache HTTP server, a very large Free/Open Source Software (F/OSS) project. By examining directly the micro-level, socio-temporal interdependencies generated by individual actions performed by problem-solvers, we find that self-reinforcing processes underpin the endogenous coordination of a decentralized production community, by fostering task specialization learning mechanisms. Different types of activities can coexist and be coordinated over time in a decentralized decision environment. Our analytical goal is to show how sequences of interdependent problem-solving actions become embedded in temporal sequences of relational events, which then trigger specific self-reinforcing mechanisms that provide the social infrastructure sustaining the production of F/OSS.
A Different Path for Public Demands and Their Effects on the Processes of Democratization

Jorge Francisco GARCÍA CASTRO, Universidad de Guadalajara, Mexico

En clave de la Teoría de Sistemas de Niklas Luhmann, ésta investigación plantea una explicación acerca del proceso mediante el cual la demanda histórica sobre la democratización de medios en México, retomada en mayo de 2012 por el movimiento #YoSoy132, logró instaurarse en la agenda legislativa para su posterior discusión y aprobación como Reforma de ley en materia de telecomunicaciones en junio de 2013. Esto es: identificar la articulación y evolución de una demanda pública propagada principalmente por Twitter, su consolidación en el ámbito mediático y la evocación a nuevos actores, la formulación de múltiples variantes y su consecuente aprobación e implementación como política pública. Así, la relación e irritación intersistémica que se pone en análisis permite explicar y asociar la operabilidad de diversos sistemas (político, jurídico, mediático, científico, y los movimientos de protesta), en su participación sobre dicha demanda y como fuentes de influencia y de tensión social a lo largo del proceso de decisión del Estado. Para ello se realiza un estudio longitudinal de corte cualitativo que incorpora principalmente recursos audiovisuales de YouTube, documentos oficiales alojados en Internet, y notas de periódicos digitales. De esta manera mediante un análisis documental fundamentado en la Teoría de Sistemas, el estudio permite la observación de la interacción sistémica y sus efectos en el aparato estatal al momento de tomar una decisión de vinculación colectiva. En este sentido, la hipótesis que rige ésta investigación parte del supuesto de que gracias a la viralización y mediatización de las demandas a través de las redes sociales y de los medios masivos de comunicación, a la participación de actores especializados y a la respuesta de un grueso de la población, se aumentó la presión sobre el Estado lo cual dio paso a un acoplamiento estructural orientado por el cúmulo de irritaciones provenientes de su entorno.

Systems, Sociocybernetics and Interdisciplinary Issues. Part II

Session Organizer: Jose A. AMOZURRUTIA, Universidad Autonoma de Mexico, Mexico

Representations of the Social in Digitalized [and Cyber] Domains of the Non–Dedicated

Cezary Józef OLBROMSKI, The Alexander S. Onassis Public Benefit Foundation, Greece

The paper is a part of the Author’s project focused on creating new kinds of the natural by the social. The main thesis is that the social creates autonomy of the natural. Communication is abounding with symbolisations enough to force out traditional perception of the natural as something external. Civilization and culture are abounding with symbolizations enough to construct the autonomous natural. Up–to–date culture is dominated by hermeneutics, re–creations, and re–productions of achievements. It is not only a testimony of civilizational crises shaped with up–to–date popular discourses but also it shows that the social is autonomous because it exists as something creating nothing new.

The Author analyses the presages of constructing the natural as representations of the social. The natural becomes an autonomous domain of the social because it does not create the dedicated. The dedicated has been a kind of exaggeration, exemplification, and preservation of meanings. Creating—the–natural individual human beings are not referred to any non–verifiable external. Physical, digital, and cyber acts of creation of the natural are representations of the social and they are not participating in something given as unknown. In other words, acts of [self–]uncovering are connected with acts of [self–]creation of social subjects. The Author argues that there is a transitory/preparatory stage of the social being dominated/occupied by new digital skills and possibilities. The beginning of the next stage will be signed by rejections of the dedicated and it will be directed towards creations and constructions of the natural. An individual human beings become autonomous—as–non–dedicated subjects of the social. The up–to–date social accepts huge number of homogenous variants, the future social will expand its cyber heterogeneity as the natural. The consciousness introduces itself as the natural. New kinds of cognitive and non–dedicated absorption will re–define—but without reference to ethics—Socrates’ cognitive valuation. The subject is the reason.
The Paradox of Managing Diversity. Observations of a Personnel Management Strategy in Mass Media Organizations from a Systems Theoretical Perspective

Jan Inge JÖNHILL, School of Humanities, Education and Social Sciences, Örebro University, Örebro, Sweden

On the background of “anti-racism” legislation, of ideas of cultural diversity and incentives of the marked economy, the management strategy of diversity management was developed in the early 1990s. It has since then made success globally as a “new paradigm for management”. – The aim of this paper is to present some results from a research project on diversity management in mass media organizations in Sweden. The project applies Luhmann’s systems theory as main approach for several reasons. In this case (1) as it allows analyses from different observer perspectives, (2) as the functional and structural conditions of society and its organizations and (3) as well the complexity of the issue must be taken into account, and (4) as the distinction between acting and performing becomes apparent in this communication-based theory. Social changes in direction of (more) equal opportunity and inclusion chances as to cultural diversity have occurred in the studied media organizations. In a previous study one of my findings was that it is reasonable to assume that diversity management is more adequate than other modes of managing issues of cultural background of journalists, such as quota and also a high confidence as to legal regulations. Among my findings are that diversity management makes a difference due to a recent professionalization of personnel managing in the media companies. Competence-based assessment as a principle generates a prerequisite for journalists with migrant background to achieve equality in opportunity, when e.g. applying for a position or by team building. The study, thus, shows that focusing on the matter of competence and not focusing on person’s cultural background (but being aware of the social matter of disfavour), paradoxically, is likely to be a functioning or even successful path of managing this issue.

Luhmann and Constructivism

Eva BUCHINGER, Innovation Systems, Austrian Institute of Technology, Vienna, Austria.

Luhmann’s theory of autopoietic social systems is increasingly receiving attention in the scholarly dispute about constructivism. “A reality that remains unknown”: this is part of the title of an article by Niklas Luhmann that summarizes epistemological considerations on constructivism (scattered in his voluminous work on social systems theory, which he developed over three decades). His approach is not the denial of reality but a “de-ontologization” (ontology understood in the philosophical meaning of dealing with whether or not a certain thing or entity exists). Unsurprisingly, for those who are familiar with his work, Luhmann sees his contribution to constructivism in the elaboration of the system/environment distinction. At least since the so-called autopoietic turn (in which he re-conceptualized the idea of social systems by including notions such as meaning and self-reproduction as constituting features), issues such as openness/closure, re-entry, and observation have become pivotal. Thereby he aims at overcoming Immanuel Kant’s transcendental philosophy. That is, the transcendental/empirical distinction has to be replaced with the system/environment distinction. Luhmann argues that the concept of environment, as well as the corresponding concept of system, was not available at Kant’s time. Instead, the transcendental/empirical distinction was developed to overcome a self-referring circle in which everything is the object of knowledge. The paper explores the transition from Kant’s “transcendental/empirical” to Luhmann’s “system/environment” distinction to provide a deepened understanding of Luhmann’s constructivist approach. Luhmann’s construction of reality via the system/environment distinction is discussed with respect to preceding concepts provided by philosophical and system/cybernetic scholars such as Kant, Husserl, Piaget, von Glasersfeld, von Foerster, and Maturana & Varela. The innovativeness of Luhmann’s approach is then critically evaluated. The text is a contribution to the positioning of this approach as part of the philosophical and systems/cybernetics constructivist heritage.
Sociocybernetic Theories and Conceptualizations of Social Change and Transformations

Session Organizer: Karl-Heinz SIMON, University of Kassel, Germany

Innovation: Within and Between Systems
Eva BUCHINGER, Innovation Systems, Austrian Institute of Technology, Vienna, Austria

Innovation is a complex phenomenon which is difficult to comprehend. Innovation researcher in economics introduced therefore the concept ‘system of innovation’ (SI). It started with the notion of ‘national systems of innovation’ (NSI) focusing on country specific institutions in the 1980ies and has been further developed by focusing on interactive learning up to the 1990ies and beyond. The SI approach has been quite successful and is now widely used. Its strengths are the holistic (i.e. systemic) and interdisciplinary perspective; its weakness the theoretical ambiguity. For example, most of the SI approaches emphasize the role of institutions and of learning, but both concepts are differently used. Institutions in SI approaches could mean organizations as well as networks of organizational and individual actors as well as formal/informal ‘rules of the game’; and learning is likewise attributed either to individuals and their creativity or to organizations or to (mixed) networks. In this paper the theory of social systems (TSS) (in the version of Niklas Luhmann) is applied to the phenomenon of innovation. In TSS, innovation is basically defined as an evolutionary process in the interplay between a system and its environment, consisting of variation, selection and re-stabilization. Thereby, (i) variation occurs on the elemental level of social systems, i.e. communication units; (ii) selection occurs on the structural level of social systems, i.e. structures of expectations (i.e. difference to Darwin’s natural selection through the environment), and (iii) re-stabilization occurs when ‘innovated structures’ are compatible with the social system (i.e. do not destroy the social system’s survival, allows for the autopoietic reproduction of the social system). On basis of these distinctions, the idea of ‘system of innovation’ is challenged by the idea of ‘innovation within and between systems’. The focus is thereby on the economic and the scientific system and their interplay.

Vulnerability of Functional Systems in Societal Transformation: On the Case of Political System
Toru TAKAHASHI, Faculty of Law, Chuo University, Tokyo, Japan

Populist political movements indicate the weakening of formal political processes. Today’s advanced information society provides influential channels to get popularity and political momentum. The theory of functional differentiation predicates the autonomy and unity of each functional system. But, through mass media and the internet, populists can stimulate a societal emotion and mobilize it. We can observe, at least in Japan, a bifurcation of two political processes. On the one hand, there are formal and traditional political processes. Various interest groups support political parties as their represents (or agents) in the political arena which adjust their interests. On the other hand, there is an arena of political communication in which various political groups are contesting to get societal resonances. Now, political system becomes increasingly vulnerable (or sensitive) to opinions in this second arena. This arena of political communication could bring a risk (e.g. of political extremism). But, it could also bring a chance (e.g. to achieve an ambitious consensus on social reform for sustainable society). One way or another, we can describe this situation from the point of view of social systems theory. Niklas Luhmann defined a resonance of social system as a reaction of social system to its environment in accordance with its structure. I will slightly redefine the concept of resonance to describe a societal resonance. That is, a resonance of social system is a reactive reproduction of communication in accordance with its structure (e.g. schema). So, we can regard agendas in the second arena as societal structures which canalize societal resonances (communications). And, the problem is how societal communications affect trajectories of functional systems. The case of politics will be suggestive for this problem.
The Management of Complex Organizations and Firms: A Sociocybernetic Challenge
Bernd R. HORNUNG, University Hospital Giessen and Marburg, Germany and John RAVEN, University Hospital Giessen and Marburg, Germany

Managing Complex Organizations In A Global WORLD
Bernd R. HORNUNG, University Hospital Giessen and Marburg, Marburg, Germany

Modern business organizations are complex dynamic systems in a complex dynamic environment. This environment has the properties of an eco-system rather than those of a controlled and steered system. This holds for the economy and for its particular subsystems like the health care system, both constituting the complex and dynamic environment of internally complex organizations like hospitals. Such organizations often move at the edge of chaos and sometimes beyond. In their operations they need to be understood as actor-systems at different internal levels.

Examples from hospitals will illustrate management problems resulting from the combination of high internal and high external complexity and dynamics. This requires to clarify the concepts of both complexity and organization from a sociocybernetic perspective. A generic reference model of organizations will be used for the subsequent analysis. Central to this is Luhmann’s(*) dictum, that only complexity can reduce complexity. It will be analyzed how this could be achieved by taking a sociocybernetic approach. For this purpose concepts will be used like: open information, teamwork, task forces, leadership styles, subsystem autonomy, problem-orientation, staff-line organization, matrix organization, Web 2.0 leadership, organizational culture, mediation, etc.

Any activity, also informational, requires energy. Increasing the efficiency of an organization when facing complexity can be achieved by: (a) Changing objectives, (b) reorganizing structures, (c) reorganizing process, including management, (d) depleting stocks (material, financial, but also health and motivation of staff). The strategy chosen has to be sustainable without unduly reducing the internal complexity of the organization, essential for its capacity to cope with external complexity. This both according to Luhmann and according to Ashby’s "Law of Requisite Variety". Hypotheses will be presented, how a sociocybernetic approach to managing complex organizations can help to avoid problems and failures.

(*) Apart from this, the paper will present a sociocybernetic but non-luhmannian approach.

Inmigration Key for Immigrants in Spain 2013
Antonio GUTIERREZ RESA, Social Work, UNIVERSITY UNED, MADRID, Spain

According to our recent research study/survey, it shows that the immigrants in Spain 2013 (Romanians 19%, Morroccans 18.8%, Ecuadorians 9.4%, subsaharian Africans 6.3%, Colombians 6.1%, Bolivians 9.4% and those with dual nationality 16.9%) 77.6% of them live in rental housing, 27.3% work in private labour market with temporal contracts and 21.1% with fixed or permanent contracts, while 26% are unemployed although they have worked before. 57% of them have the intention is to stay definitely and in general terms, they are highly satisfied with the services. They are also highly satisfied with their interpersonal relations (88%), with their family life (80%) and at work/studies (63%). Nevertheless, only 44% of them are satisfied with the economic situation. 83.5% consider their cultural contribution as positive and 75.3% consider their economic contribution as positive and 69.8% consider their demographic contribution as positive. 50% of immigrants surveyed think that they should keep their civil traditions, specially if they can. However, 68% agree that the languages which are majority should be included in the academic curriculum and 37% agree with the headscarfs ban in classrooms. Integration for 78% of the surveyed is a society issue, and those with more difficulties are the Magreb population 36.9%, the subsaharian African countries 13.8% and the Chinese 13%. We conclude with the affirmation that, according to the immigrants, 50% of them agree that the economic aids should exist for Spaniards and immigrants independently from their legal or illegal administrative status and for 97% of them, they should have the right to live with their families, 95% think they should collect their unemployment benefits after paying their social security taxes, 80% think they should be able to vote in local/municipal elections and 85% think they should be able to obtain the Spanish nationality.
Session Organizers: Saburo AKAHORI, Tokyo Woman's Christian University, Japan, Eva BUCHINGER, Austrian Institute of Technology AIT, Austria, Hiroshi DEGUCHI, Tokyo Institute of Technology, Japan, Czeslaw MESJASZ, Cracow University of Economics, Poland and Akira TOKUYASU, Hosei University, Japan

Toward Next Generation Social Systems Sciences - from Cross Cultural and Science of Artificial Points of View -
Hiroshi DEGUCHI, Department of Computational Intelligence and Systems Science, Tokyo Institute of Technology, Yokohama, Japan
In this presentation, we focus on cross cultural analysis of social systems as a social science of artificial. There are many sociological ideal types and its systemic properties that are developed by sociology and social systems sciences. These models are sometime considered as cross cultural ones but sometime not. Compared with economics, sociology does not depend on rational nor normative standpoint. Where do the universality of the ideal types and its systemic properties come from? That is a basic question for social systems theory and the reason we need more cross cultural consideration and talks. Besides the cross cultural universality of the theory, we have to consider another universality of the theory for constructing new generation social systems theory. Nowadays our society is becoming more artificial day by day. On the one hand each society has its historical root, but on the other hand we are constructing artificial new global society. We have to design our society and life world from "as is" to "to be" by ourselves as something artificial. There is no sacred canopy. How the process should be analyzed, how it can be managed and what type of theoretical concept should be constructed? That are open and serious questions for social systems sciences. We focus on basic concept of sociology such as individual, self, reference group, family, organization, society, social norm, micro macro link, meaning, role taking, function, structure etc. How these basic concepts can be defined on more artificial context and cross cultural context. We reconsider these systemic properties from theoretical and a cross cultural point of view.

Significance of Agent-Based Simulation in Social System Theory
Takatoshi IMADA, Graduate School of Decision Science and Technology, Tokyo Institute of Technology, Meguro-ku, Tokyo, Japan
Since the last decade of the 20th century, agent-based simulation method has been developed and becoming a powerful tool for social science. This approach has attracted attention as a new trend, which clarifies the social dynamics and complex human relations. Especially, the following is an important advantage of this approach. This simulation is performed in bottom-up and process-traceable ways, therefore we can clarify how the macroscopic form and social order are generated from the interactions of individual agents. The agents only receive a small number of constraints, each interacting autonomously in the computer space. Then we can reproduce by simulation the manner of forming the ordered whole (social system) from individual behaviors. The advantage of agent-based simulation lies in that we can explore the micro-macro link between individual and society by a bottom-up procedure. There has been a deep division between the methodological individualism and collectivism. To bridge this division has been the most difficult work so far. Because of the emergent property of a macro level, it has been regarded as almost impossible to derive the characteristics of macro (society) from the micro (individual). In fact, while efforts to the problem of micro-macro link have been made in sociology, meaningful results have not been achieved. In the presentation, I argue the micro-macro problem from three aspects based on the viewpoint of agent-based simulation. First is to examine the mechanism of emergence with reference to Schelling’s “A Self-Forming Neighborhood Model.” Second is unintended consequence of action by referring to Yamamoto’s model regarding a trap of egalitarianism in the logic of social contract. Third is mathematically unsolvable solution with reference to Axelrod’s “Tit for Tat” strategy in the iterated Prisoner's Dilemma game.
The New Normal As a System Challenge
Paul LilLrANK, Aalto University, Espoo, Finland
Since the Lehman shock 2008 there has been a growing sense that the economy is out of joint. The world is not as it used to be during the period of Modern Normal, roughly from 1870 to 1970. The growth potential and progress of advanced economies is lost in systemic changes.

There have been several attempts at grand diagnostics. Francis Fukuyama and Avner Offer have described the Great Disruption in the microsystems of social life as a consequence of mass opulence. For the majority of people in the advanced world biological survival is no longer a daily concern, therefore the traditional foundation of morals have been eroded. The New Normal argument by Tyler Cowen and Richard Gordon has it that “the low hanging fruit” of modern technology, demographics, the cold war, and educational mobilization have been picked. The fall of the iron and bamboo curtains have opened the world and, according to Moises Naim, created the “more, mobility, and mentality revolutions”. Daniel Alpert argues that the main disruption is an oversupply of both capital and labor, and a lack of aggregate demand. Edmund Phelps details how massive borrowing is not channelled into productive investments, but absorbed by new corporatism. Tyler Cowen argues that due to Internet, globalization and smart machines “average is over” and the middle classes are shrinking. Ian Morris builds a historical argument about “growth ceilings” that can’t be penetrated without major systemic changes. In the international debate Japan is seen as an example of things to come. In spite of economic and demographic decline, social order and reasonable labor force participation have been maintained. Therefore the question is, can Japan again be seen as “number one” in adjustment to the New Normal?

Hiroko INOU, University of California-Riverside, USA
The comparative world-systems approach analyzes systems of societies rather than a single society. Interaction networks in world-systems comprise systems of human societies which are bounded in space and engage in regularized interactions and exchanges. The evolutionary growth of the connections and intensified linkages through cycles and oscillations has formed increasingly larger and integrated world-systems over time. Structural globalization is thus conceptualized as an elementary trend that prevailed in the last two centuries. While the world-systems approach explains evolutionary growth of interaction networks over time, it is conscious of historical contingencies as well as spatially and temporally specific conditions for local polities. This aspect is compatible with recently developing agent-based social science. Applying spatial agent-based simulation, the current study engages in examination of historical cases. In particular, this study focused on the formation of large-scale polities and social complexity in East, Central, and West Asia in the middle ages. By so doing, this study examines the dynamics between local emergent processes, macro-interaction networks, and their impacts on the formation of large-scale polities and social complexity.

Special Sessions in Cooperation with the Japanese Systems Theory Societies. Part II: Dialogue on Niklas Luhmann’s Sociological Systems Theory

On the Function of “Symbolic Media” in the Process of Functional Differentiation
Akinari TAKAHASHI, Kyoto University, Japan
It is one of the most important contributions which Niklas Luhmann has made toward the thesis of functionally differentiated society to indicate the roles of “symbolic media” in concrete temporal events of communication. Medium/Form-distinction is the theoretical device introduced by Luhmann for the purpose of analysis of Function- functioning in autopoietic and information processing systems (including meaning-processing communicative ones). In short, it is necessary for meaning-processing systems in general, communication systems in particular that they constitute any appropriate distinction between Medium and Form and symbolize objects in the environment as Forms through Medium to operate and observe them.
We focus on this distinction of Medium/Form. This presentation shows how Forms in Luhmann’s terms, which mean distinctions with asymmetry between the inside and the outside, function as symbols in order to enable the self-reproduction of the communication in which they are adopted. And we deal with “health as symbolic media” for an instance so as to elucidate the significance of this theoretical device for empirical researches. In concrete terms, we will take up a case study about care work for people with physical disabilities in Japan in order to scrutinize the validity and the applicability of the thesis of functional differentiation in Luhmann’s theory. It shall be confirmed that various kinds of Forms employed as symbols are so connected with “health as symbolic media” as to allow the emergence and the self-reproduction of the functionally specific communication of care work.

Observing Fukushima: A Case Study of Japanese Nuclear Policy through Luhmann’s Social Systems Theory
Andrew MITCHELL, University of Kumamoto, Japan

Since the Fukushima Daiichi nuclear disaster three years ago there has been much debate regarding Japan’s nuclear policy. These debates usually focus solely on the technological, economic or strategic issues at hand, or on the dwindling public support for a nuclear Japan. Whilst all of these arguments have their own strengths, they discuss specific points regarding nuclear policy with little regard to the wider picture. They all also describe what the political system should do to resolve the issues they raise rather than considering how the political system rationalises nuclear policy and the associated risks. By utilising Luhmann’s Social Systems Theory, this paper proposes to frame the different views on the nuclear issue as a problem of observation by different observers within a functionally differentiated society. The paper shall discuss the technological, economic and public opinion issues surrounding Japanese nuclear power, demonstrate how these are first-order observations of different observing social systems, and how Japan’s political system acts as a second-order observer of these observations. By understanding politics as the social system which acts to manage system expectation by introducing binding resolutions upon society (and thus deals in risky decision-making), the limits of Japanese political action when faced with technological risks on one hand and the desire to maintain Japan’s economic and strategic position on the other will be illustrated. This paper concludes that despite the risks of and public hostility towards nuclear power, the rationale of Abenomics and emerging strategic threats in East Asia leave Japan with little choice but to restart its reactors, a conclusion which is consistent with current Japanese nuclear policy.

Research Program Gap Between Luhmann's Social Systems Theory and Contemporary Systems Sciences
Hiroshi DEGUCHI, Department of Computational Intelligence and Systems Science, Tokyo Institute of Technology, Yokohama, Japan

We discuss the issues of social systems theory in comparison with contemporary systems sciences. Social systems theory by N. Luhmann is characterized by theoretical approach of macro communication process [Luhmann, 1984]. This approach came from the theory of representation collective by E. Durkheim. This macro approach is natural from a sociological point of view. While it is strange and out of scope from the standpoint of standard semantics of analytic philosophy. In the history of analytic philosophy, the meaning of proper name is given by referred object in the real world or at least as rigid designator (Soul A. Kripke) or definite description (Bertrand Russell) [Kripke,1972]. Common noun is treated as a set of objects. There is a weak connection between sociological treatment of representation collective and these analytic philosophical treatment. There is a strong gap of research program between Luhmann’s social systems theory and contemporary systems theory. The gap causes incommensurability between two research groups about theoretical terms such as systems boundary, environment, micro-macro link, self reference, communication, complexity, and autopoiesis. The purpose of this presentation is to find the missing link between research programs and bridge this gap from theoretical and methodological points of views.

The Sociocybernetics of 'cybernation' and the Emerging 'cyber-Nation'
Session Organizer: Bernard SCOTT, Centre for Sociocybernetics Studies Bonn, United Kingdom
Social Systems Form Simulation to Observation
Lella MAZZOLI, Communication Studies & Humanities, Università di Urbino Carlo Bo, Urbino, Italy; Fabio GIGLIETTO, Communication Studies & Humanities, University of Urbino Carlo Bo, Urbino, Italy

The cognition-computing short circuit is still affecting both neuroscience and computer science today. Social systems theories, on the one hand, and agent-based simulations on the other have once more pinpointed the traditional sociological dualism between macro-and micro-sociology. However, the advent of ‘Big Data’ has paved the way to new techniques of investigation based on the study of new types of data, such as conversations taking place on popular web sites like Twitter and Facebook, traces left by our mobile devices or data generated by wearable sensors. Thanks to these techniques, we can go beyond simulation and observe the experiment within the social “black box” in the same way that neuronal functional magnetic resonance imaging (fMRI) does as regards to the brain. This paper discusses the potential as well as the limitations of these new methods of sociological investigation and their spillover effects on the theoretical development of the discipline.

Reflections on the Sociocybernetics of “Cybernation” and the Emerging “Cyber-Nation”
Bernard SCOTT, Centre for Sociocybernetics Studies Bonn, Louth, United Kingdom

The term “cybernation” refers to the existing and imminent cybernetic technologies of control and communication, data storage and retrieval, social media, user modelling and intelligent support for man-machine conversational interaction. The term “cyber-nation” refers to the emerging internet-based communities that promote social change and, explicitly or implicitly, practice forms of non-hierarchical (heterarchical) democracy. Well-known examples are Wikipedia (http://en.wikipedia.org/wiki/Main_Page[1]), Avaaz (http://www.avaaz.org/en/) and Change.org (http://www.change.org/en-GB). A less well-known example is the Zeitgeist movement (http://en.wikipedia.org/wiki/The_Zeitgeist_Movement), that developed from the Venus Project (http://en.wikipedia.org/wiki/The_Venus_Project), initiated by the late Jaques Fresco and Roxanne Meadows. Fresco coined the term “sociocyberneering”. There is a Facebook page dedicated to his work (https://www.facebook.com/pages/Sociocyberneeringworld-a-better-place/175409582509717). A well-known example of an hierarchical organisation that works towards social change through cybernation is Google (http://www.google.org/). There are many other organisations that use the internet to promote their particular vision of global harmony and utopian futures. A useful list can be found here: http://www.peacefromharmony.org/?cat=en_l. Questions addressed in the paper include: What is the current state of play?, What does the future hold?, What influences are at work in terms of checks and balances on privacy and social control?, Who owns cybernation (hardware, processes, data)?, How viable is the concept of a cyber-nation in the context of existing dominant belief systems and institutionalised practices?

When It Rain It Pours: Reality Shows and Charades for Climate Change Tragedies
Juan Carlos BARRON PASTOR, Cetlich, Universidad Nacional Autónoma de México, Distrito Federal, Mexico

In September 2013, Mexico was quashed by two hurricanes during the same week. One came from the pacific and the other form the Gulf of Mexico. The consequences were tragic and colossal. The days prior to the storms the Mexican government was warned by the Mexican National Weather Service about the magnitude of the catastrophes coming, but they were more focused on ‘cleaning off’ a teacher’s demonstration at Mexico City’s main square. National TV networks were mainly focused on blasting the teacher’s movement. And only when it was too late they started a campaign to help and rescue the victims. One of the actions that became particularly emblematic was the preparation of a reality show screening an infamous TV presenter heroically ‘helping’ the victims. The farce was unmasked by a very important Mexican political magazine and one of the main journalists questioned the staging, the TV presenter has a very belligerent reaction. The scandal is in progress at the moment of submitting this abstract. Social networks are been particularly virulent at this point. In this presentation, it will be shown how this episode could be explained using sociocybernetics tools and following previous presentations of the author, it will be developed how critical sociocybernetics model would work to explain media performance and the emerging role of cyber-activists in the face of climate change disasters.
2014 Conference highlights

RC51 (on Sociocybernetics) at the ISA Congress, Yokohama, July 11th-18th, 2014.
Some personal reflections.

Bernard Scott*

Research Committee 51 (on Sociocybernetics) (RC51) is just one of many groups that make up the International Sociological Association (ISA). Once every four years, the ISA Congress takes place, attracting 4-6000 participants. As part of the 2014 event, RC51 (which has some 120 members) organised a programme of sessions, running most days from early in the morning until late evening. Our sessions proved popular, attracting many speakers and participants who were not (as yet) members of RC51. I enjoyed making new friends and re-acquainting myself with old ones. It was not possible for me to attend all the RC51 sessions. Below, I mention some personal highlights.

RC51 is special for two reasons. First, unlike other ISA groups, which focus on a particular special interest, such as education, immigration, the environment, RC51 members share an interest in applying theories and methods from cybernetics and the systems sciences to the social sciences at large. This encourages a holistic view of what is happening in the world; Second, the influence of second order cybernetics – the cybernetics of cybernetics - on our thinking (see, e.g., von Foerster, 1993) means we encourage non-hierarchical discussion and community building as a collective of mutually respecting “observers”. It was no surprise, then, that the RC51 programme included papers on “open-ness”, new forms of democracy and the question of how to understand and counter-act domestic violence (indeed, any abuse of other humans). It was no surprise, also, that many papers addressed Internet and ICT related issues, e.g., the use and abuse of personal data, the research opportunities afforded by the availability of “big data” and new forms of political activism.

On the theoretical front, we continued our ongoing debates concerning the coherence and value of Niklas Luhmann’s (1995) theory of “social systems”. My impression is that, as a community of scholars, we are deepening our understanding of what the theory offers and recognising more clearly some of its shortcomings. I, myself, was delighted to hear, from our member, Pablo Navarro, a more cybernetically rooted approach to questions of the “social”, based on the concept of “social objects” that are co-constructed in the regularities (“eigenbehaviours”) of social interactions and some of which may, in turn, impose structure on those interactions. Navarro urged us to be alert to new “social objects” that are arising at the global level, thanks to the Internet.
On the methodological front, José Amozurrutia presented a computer based “Adaptive Support System for Second Order Science” and described how it has been used to process data in a study of violence against women. Margarita Maass described a methodology for “cultural management for development”, in which a culture is modelled as an “ethno-ecosystem” and thus becomes a “fundamental component of sustainable development”. Other topics addressed in the RC51 sessions included the management of innovation, the management of complex organisations and epistemological issues. The full RC51 programme, with abstracts of presentations are included in the preceding pages of this newsletter.

A number of sessions were organised in conjunction with colleagues from Japan, thus strengthening our connections with the Asian social systems community. We were gratified to see some younger scholars and researchers participating in the RC51 sessions. We are hopeful that some, a least, will become members of RC51.

In the years between the ISA Congresses, RC51 organises its own international conferences. These offer a more intimate setting for discussion and social interaction. It is likely that our next conference will be hosted by the Humboldt University of Berlin, in August, 2015. Details will be made available on the RC51 website: http://sociocybernetics.wordpress.com/.

*Bernard Scott
Past President, RC51

The Adventure of a Session at the Yokohama World Congress on: The Management of Complex Organizations and Firms

Bernd R. Hornung*

The session on "The Management of Complex Organizations and Firms - A Sociocybernetic Challenge" jointly organized by Bernd Hornung and John Raven was intended to promote discussions on this topic and suggestions for making progress. The issue itself had been discussed over the past years both in RC51 and in SCiO - Systems and Cybernetics in Organisations, a UK-based organization.

In a way, however, the session itself became a victim of the complexities of an ISA World Congress, and its organization became a sociocybernetic challenge itself. With regard to the complexities, the very early deadline for abstracts and the rigid – and in part not well-functioning – IT-machinery for submitting abstracts and designing the RC51 program did not permit the collection of the wide variety of contributions the conveners had hoped for.
Of course, it was (again) a professional congress organizer company which implemented all of this. Nevertheless, it was possible to put together a promising program: promising, until registration showed that none of the presenters would come after all. These, however, were not the only cancellations in the RC51 program. This happened possibly because Yokohama is far away, participation in such a congress is expensive, and the financial situation in the world and in universities in particular continues to deteriorate.

Thanks to our RC51 World Congress Coordinator, Chaime Marcuello, the situation could be saved by devoting the entire session to two quite different but complementary presentations: "Managing Complex Organizations in a Global World - Sociocybernetic Challenges and Hypotheses" by Bernd R. Hornung and "The Foundation of a Theory of Everything" by Arne Kjellman, dealing with the philosophical and epistemological foundations of knowledge in a subjectivist approach.

As most of the participants, also in this particular session, were new to RC51, Bernd Hornung gave a short summary of some important points which had been exposed already in previous RC51 conferences in Cracow, Faro, and Merida. The key point of this presentation was that the bottleneck for managing and decision-making is the head of the individual manager or decision-maker, who has limited time and limited processing capacity. The sociocybernetic challenge is how to organize managing and decision-making under such conditions. A starting point for analysing the problem in systems terms and for looking for remedies is Luhmann’s dictum that only (internal) complexity (of the decision-maker) can reduce the (external) complexity (of the environment). The author argued that it is worthwhile to go back to W. Ross Ashby who, with his "Law of Requisite Variety" had formulated basically the same issue in different terms but with much more precision.

Bernd Hornung presented a number of organizational means, indicating some of their advantages and drawbacks, which are used, e.g., in hospitals. They are attempts to manage the complexity of a hospital in the complex and fast-changing environment of a contemporary high-tech health care system. But if we "only" want to manage complex organizations like hospitals or universities, why do we need to go back to philosophical issues like Arne Kjellman’s "Theory of Everything" and the "Subject-Oriented Approach" (SOA)?

In a realist’s world there are two reasons that make such management and reduction of complexity questionable:

1) The problem-oriented approach in sociocybernetics provides the flexibility needed, but it also implies components of subjectivity.

2) The technique of modelling in general, also used by realists, implies strong subjective components too.
In the constructivist’s world of the Subject Oriented Approach (SOA) these problems cannot be completely removed. However, they show up in a quite different light, and are considerably softened.

Arne Kjellman denies a shared outside reality, and explained that according to the Subject-Oriented Approach an eventual ontological reality is out of reach. Therefore each and every one of us lives in a personal subjective world called a priverse (= a private universe). To explain this, he, in a first step, led the audience in a kind of mental exercise to reducing its knowledge, including time and space, to zero and then to contemplate what remained. This procedure is somewhat similar to Husserl’s "eidetic reduction". What is left is not "nothingness" but the feeling of an "I" first coming up in a boot-strap manner. From this basic feeling experience of me as experiencing subject I then start to develop my personal knowledge, i.e., to construct my strictly internal priverse by means of sign functions, i.e. a pointer and its associated memory of an experience. This constructed priverse is strictly mine, not the reader’s – nor the one of Arne Kjellman. Accordingly you, he and everybody else collects and constructs a strictly private priverse in subjective time.

The three types of feelings make up such a priverse:

a) what I consider my inner bodily feelings and emotions,

b) the sight of my body and its actions in the conceived "external” world,

c) what’s beyond my body, the "furniture of the world".

Arne Kjellman tried to make clear, that these three kinds of feelings and what results from them are personal constructions. As such they are all inside my priverse - hence subjective.

He used a series of very carefully and skillfully designed series of animated pictures to try to bring this message across to us. However, for somebody with a lifelong training in realism it is quite difficult to understand such animations and the arguments behind them, when one has not attempted before to break out of the confines of realism.

With regard to such difficulties in understanding the issue at stake, there was practically no time left over for discussion, regardless of the fact that both presenters had had more time available than usual. Issues which are so demanding and complex cannot be exposed briefly and hastily. To come back to Luhmann: “Only complexity (in a presentation) can reduce the complexity (of what is presented).”

To summarize: The message of this session for coping with complexity is, that we need not to worry about subjectivity in modelling and the sociocytbernetic problem-oriented approach, since subjectivism goes all the way down to the very foundations of knowledge and its philosophy.

Buckley Award 2014

Every year the RC51 assign during our annual conference the Walter Buckley Award to the most effective and clear presentation. See our website to find about previous winners. This year, the at the Yokohama conference the award was given to Giovanni Boccia Artieri and Laura Gemini (University of Urbino Carlo Bo) for their presentation titled “Towards a Methodology of Visual Analysis on Twitter. the Earthquake in Northern Italy”. Here an extended abstract of their research and some images to show their research work.

Towards a Methodology of Visual Analysis on Twitter. the Earthquake in Northern Italy
Laura GEMINI, University of Urbino Carlo Bo, Italy; Giovanni BOCCIA ARTIERI, University of Urbino Carlo Bo, Italy; Elisabetta ZUROVAC, University of Urbino Carlo Bo, Italy; Manolo FARCI, University of Urbino Carlo Bo, Italy

The catastrophic event represents a relevant and interesting place of observation of communication practices and narration strategies started by media.

Traditional media represent the catastrophe with almost known strategies – both in the entertainment frame and in order to fulfill their informative role using precise selective criteria – otherwise social media have to be considered as different, if not new, contests of production and circulation of the catastrophic imagery. In these cases visual communication – in other words the production, diffusion and usage of images – has certainly a central role for the symbolic handling of natural determinism. We faced a mutation in research which reflects how the nature of the data changes and how its collection is modified. As to the prospect of the data, we can consider how the permanence of the digital content modifies certain prospects of researchability on communication. Permanent communication was traditionally made by writings and audiovisual recording and therefore made researchable only if conserved by diffusion or archived. In time this has produced a distinction, within society:

1. on the one hand we have a “cultivated semantics” (Luhmann 1980) (that is researchable) – or rather a semantics passed through mechanisms of production in an increasingly refined cultural industry;
2. on the other hand we faced a not cultivated semantics that, although created within communication practices, could not take root because, even when permanent, it was not visible and therefore not researchable.

Today instead the digital scene offers the possibility of moving our research in not cultivated communicative territory: that is diffused interpersonal communication, those online conversations that take root in the spaces on the net becoming both visible and researchable.
Conversation production and the stabilization of a semantics of society no longer pass solely through forms of interpersonal and mass communication which are distinct realities, but passes through new ways in which they can relate. From this theoretical background our paper tries to answer the topic proposal of the RCS1 panel about “Observing Social Systems in the Era of Big Data” by presenting the findings of a qualitative research focused on the relationship between Twitter and the social media system.

From these assumptions, the paper presents the results of a research conducted on a sample of 4257 images uploaded on Twitter during the first day of the earthquake that happened in northern Italy May 20, 2012.

We have acquired all the Tweets containing the keyword # earthquake with software called YourTwapperKeeper. Then from this first set we extracted all the tweets that contained images. On the basis of this analysis, it is proposed a typology of images to sustain a first and general work hypothesis finding that during catastrophical events, the image has not only a re-fero function as an evidence of the ambient trauma, nor just a re-ligo function as social sharing of drama. The images shared on social networks are answering to the need of reprocessing in a symbolic way the catastrophical trauma, transforming it into an efficient occasion to activate new rituals of socialization and collective sharing.

Note: images of page 29 and 30 where kindly provided by the authors of the presentation.
This research focuses on Twitter peculiarity – as a primarily textual medium and characterized by precise connection dynamics between the users – to detect, by the application of the Social Network Analysis, the weight of the circulation of some influent images in order to spot the iconic images and to describe the social networks which explain their emersion and circulation.

The hashtag #earthquake worked as a selective function which aggregated all the communication about the topic. This function seems to operate on the semantics level as a first processing of the sense: it is a direction to the familiar and everyday semantics to the common sense, according to Luhmann’s perspective. This first processing through the practices of sharing has revealed that those representations were able to give an immediate response in terms of sense to the worries of users. Those images worked as social representations needed to process fear and trauma.

Twitter as an environment is more complex than the social media system because:

a. Twitter internalized the media system code – information/not information – and uses the criteria of the mass media programs – the selective criteria for the news or the entertainment logics for example, and it means that, in a certain way, Twitter becomes a medium.

b. At the same time Twitter has its specificity that hybridizes the context emerging from the intersection between mass media and Twitter as well, by making Twitter something different from a mass medium. In this way the “orientation towards persons” and social relations become visible.
Deeply shocked, we had to take note that Nils O. Larsson, one of the authors of the last issue of Journal of Sociocybernetics, passed away very unexpectedly. For many years Nils O. Larsson was a member of the Research Committee on Sociocybernetics (RC 51) and the International Sociological Association (ISA). He took part in the World Congress of Sociology 2010 in Gothenburg, where he organized the RC 51 – Session “Global problems require solutions with a global perspective”. This session was strongly related to one of the main themes of the XVII World Congress of Sociology: sustainability, a subject which had become more and more in focus due to the threatening climate change and the present economic crisis. In the face of the increasing and sometimes overwhelming complexity of these problems it was Nils' ambition to develop an adequate research method that can analyse and design human activity systems on individual, family, as well as society and global level. He called this methodology "Decision Settings Analysis". Three of the papers, presented in his world congress session were published later in Volume 10 of JoS. But it was not granted to Nils that he could live to see this result of his efforts. He died during the editorial process. We came to know this after the Volume was already published. Today, while we are preparing the VXIII World Congress of Sociology in Yokohama, we miss Nils O. Larsson very much.

The current issue of the Journal of Sociocybernetics includes three theoretical oriented articles and one empirical study. In their article “Changing Social Focusing in Indigenous Social Movements” the authors, David Flynn and James Hay, develop a theory to explain why some social movements develop through stages of increasing intensity which they define as an increase in social focusing. The authors name six such stages of focusing: disintegration, revitalization, religious, organisation, militaristic, and self-immolation. Their theory uses two variables from the social sciences: differentiation and centrality, where differentiation refers to the internal structure of a social system and centrality measures the variety of incoming information. The ratio of the two, differentiation/centrality (the d/c ratio) is a shorthand way of saying that centrality must be matched by a corresponding level of differentiation to maintain basic focusing. To test the theory the authors examine historically indigenous social movements, in particular, the Grassy Narrows movement in northern Ontario Canada.

Ksenia Sidorova, Roxana Quiroz Carranza and Astrid Karina Rivero Pérez present an empirical study about the youth in a marginalized Community in Merida, Yucatan, Mexico. The subjects of the research are all students of a high school, created by a local university specifically for the needs of their community. The study looks into the processes of their construction as knowing subjects that possess their own ideas on what it means to be young, participate in personal networks, and have had a unique experience related to the human rights, which
In continuation of his “Introduction into Sociocybernetics” Roberto Gustavo Mancilla presents now the third and last part which is named “Fourth Order Cybernetics” and where the author focuses on the question of rationality and language. The first and second part were published in volumes 9 and 10 of JoS.

Finally, looking forward to the 50th anniversary of the death of Norbert Wiener in 2014, Michael Paetau asks in his article “Niklas Luhmann and Cybernetics” to what extent can we include Luhmann’s work in the cybernetic tradition. What are the significant connection-points between cybernetics and Luhmann’s work? What is the relevance of this connection for Luhmann’s own theoretical development? What are the congruences and what are the differences? To what extent is Luhmann’s Theory of Social Systems, given his critical distance, integrable into the spectrum of the approaches of “New Cybernetic” (as formulated by Geyer & van der Zouwen in 1986)?

The next edition of JoS is currently prepared. For further issues we invite scholars who have their background in the field of systems theory, sociocybernetics, information- and communication science, and who apply this for studying various social phenomena regarding their complexity and dynamics, to submit articles for publication in the Journal of Sociocybernetics. For submitting articles authors need to register with the journal prior to submitting. People who want to register have the option to register as a reader or as an author. Every reader or author can register by themselves using the journal’s website. After clicking the register item they will be guided through the registration process. After registration they will be able to login by username and password and then authors may submit their papers. The system will immediately confirm the submission and will automatically trigger the review process. Authors will get an email with a URL that will enable them to track its progress through the editorial process once they are logged in. We recommend reviewing the “About the Journal” page for the journal’s policies, as well as the “Author Guidelines”.


Make a place in your agenda for the next RC51 Conference 2015

Date: First week of August 2015 (August 3-7)
Place: Humboldt University Berlin.
Local Organiser Coordinator: Louis Klein.
Soon more information will be available.
Board elections 2014
(See also: Call for candidates, e-mail September 23, 2014)

According to our statutes the election of members for the RC51 Board are now due. This is a call for candidates, following which the Board members will be elected by e-mail ballot. The statutes specify the following rules:

- Candidates must be RC51 members in “good standing” (i.e., RC51 member and ISA member).

- Candidates must be willing to serve the full four-year term if elected.

- Candidates must have the initial written support of at least three regular members in good standing.

- In order to ensure that there are sufficient candidates, the outgoing Board has to set up a Nominating Committee whose duty is to ensure there is a least one candidate for each position.

- Board members can serve no more than two consecutive four-year terms.

- The Board shall contain no more than three members of the same country, while an effort shall be made to ensure a fair regional as well as disciplinary and gender representation.

The members of the Nominating Committee for 2014 are Eva Buchinger (outgoing President), Margarita Maass (outgoing Vice President) and Bernard Scott (outgoing Past President).

The Board positions to be filled are:

- President, Vice-President, Secretary, Treasurer, Newsletter Editor, Website Editor, Journal Editor.

Candidates should state what Board position(s) they are interested in occupying. Please send your applications together with a brief (c. 300 words) CV and statement of intent and your letters of support (email messages are acceptable) to all three members of the Nominating Committee (eva.buchinger@ait.ac.at; margarita_maass@yahoo.com.mx; BernCES1@gmail.com). THE DEADLINE FOR APPLICATIONS IS OCTOBER 20TH, 2014.

Full Schedule:

- October 20th, 2014: deadline for applications
- October 24th, 2014 – November 18th, 2014: e-mail ballot
- November 25th, 2014: announcement of the election results
IFSR and ISA events & information

3rd INTERNATIONAL SYMPOSIUM

“Advances in Business Management. Towards Systemic Approach”
January 21-23, 2015 | University for Foreigners Perugia
http://bslab-symposium.net/3rd-international-symposium-perugia-2015/scope/

WE RECOMMEND:

Social Justice & Democratization Space
http://sjdspace.sagepub.com/

Global Dialogue ISA Newsletter
http://isa-global-dialogue.net/

Current Sociology
http://www.isa-sociology.org/publ/current-sociology-latest-issue.htm

We hold no responsibility for changes of the information provided about events organized beyond the RC51. Please check directly with the organizers.

The RC51 Newsletter is open for feedback to integrate new suggestions and ideas to achieve its goal: to promote news among the ISA RC51 members and the broader scientific community interested in sociocybernetics.

Please contact the Newsletter editor with any information you would like to include or with any further suggestions. Patricia Almaguer-Kalixto endev.research@gmail.com

RC51 website http://sociocybernetics.wordpress.com

End of the RC51 newsletter Issue 29