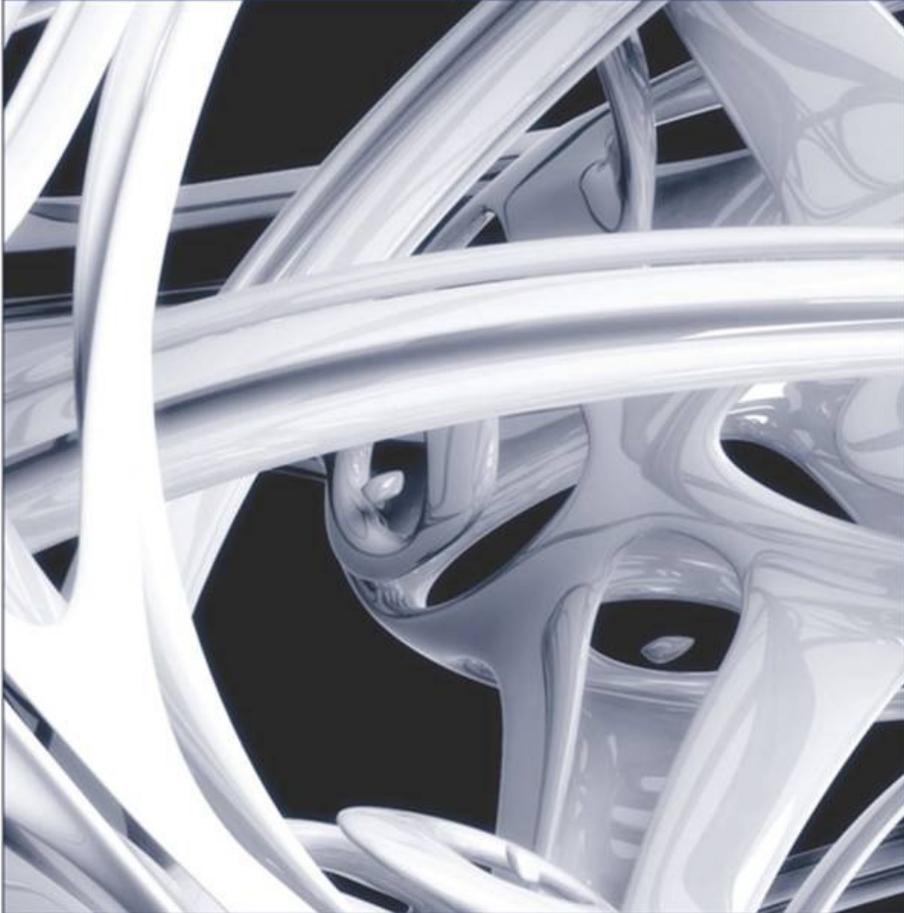


2 - 6 of July
Algarve University
Faculty of Economics

11th International Conference of Sociocybernetics
Complexity and Social Action:
Interaction and Multiple Systems



Organization:



Research Committee 51
on Sociocybernetics
of the International Sociological Association



Faculdade de Ciências
Sociais e Humanas
Universidade Nova de Lisboa



Centro de Estudos de Sociologia e Sociologia da
Universidade Nova de Lisboa

Support:



FCT
Fundação para a Ciência e a Tecnologia

CONFERENCE PARTICIPANTS

Almaguer, Patricia	3
Amozurrutia, José A.	3
Amozurrutia, José ; Boira, Santiago; Castillo, María & Marcuello, Chaime ...	4
Aramburu, Leandro & Moreno-Jiménez, José María.....	4
Buchinger, Eva.....	5
Escriche, Pedro José	5
Ferreira, Ana & Lisboa, Manuel.....	6
Giglietto, Fabio	7
Hornung, Bernd R.	7
Lisboa, Manuel & Cerejo, Dalila.....	8
Loeckenhoff, Helmut K.	8
Klein, Louis.....	9
Maass, Margarita	9
Marcuello, Chaime; Aramburu, Leandro; Doria, Andrea & Flores, Lorena..	10
Medina, Pedro	11
Mesjasz, Czesław	11
Oner, Ilknur.....	12
Pires, Edmundo Balsemão	12
Raven, John.....	13
Rueff, Maria do Céu.....	13
Scheff, Thomas	14
Scott, Bernard.....	14
Simon, Karl-Heinz	15
Xu, Ying & Lang, Graeme.....	15

Almaguer Kalixto, Patricia

Participatory-Action Research: Basis for an analytical model merging Cibercultur@ and Sociocybernetics

The paper aims to discuss the conceptual and methodological basis that can be derived from Cibercultur@ and Sociocybernetics in order to build an analytical model for Participatory Action Research (PAR). The first part of the paper discusses how PAR literature has integrated systemic perspectives in theory and practice. Action research literature has long tradition in educational field, action learning, community research and lately rural and regional development. Much of this work has been linked to systemic thinking in different degrees and styles, recognizing Lewin, Bateson, and Luhman's influence. This has derived in Systemic Action Research, a scientific methodology that engages open systems thinking and reflective inquiry (Herrscher 2006; Burke 2006, Burns 2007).

How would look like a participatory action research model based on Sociocybernetics and Cibercultur@ concepts? Previous work on the correspondence of both approaches has been discussed in the context of RC51 (González 2006, Amozurrutia 2007, 2009; Maass et al 2012, Almaguer-Kalixto 2010, 2011). Thus, the second part of this paper argues the conceptual contributions that Cibercultur@ and Sociocybernetics may offer for a PAR model proposal: a) an interdisciplinary approach as the basis of research design, b) a complex-systems perspective that emphasizes the research process as an adaptive system, d) second order observation perspective to enhance reflexivity of the process and c) the categories of information-communication-knowledge as a basis for analysis of complex research and action.

Amozurrutia, José A.

Sociocybernetic Approach to Enhance Reflexivity in Research Projects Dynamics

In this paper I focus on system development process carried out by five academic research projects as part of academic activities at LabCOMplex in the last three years. Researchers have used the Adaptive System strategy proposed from the author since 2007. Methodology and strong emphasis on second order reflexivity i.e. as cybernetic of cybernetics (von Foerster, 1973), is based on Sociocybernetic perspective (Geyer, 1995 and Hornung, 2006). At the same time, general research environment is emphasized from the Cibercultur@ approach (González, Maas and Amozurrutia, 2007), with a strong emphasis on distributed intelligence and dialogical communication among other components. System development process in each project is analyzed from Genetic Epistemology Theory. Unit of analysis is based on Jean Piaget and Rolando Garcia epistemological concepts (Garcia, 2000,2006 y Piaget, 2005). The aim is to observe how researchers observed system construction, system thinking and system products. Our final target is to show how we may represent dynamics of complex system construction and cognitive research transformation process.

Amozurrutia, José A.; Boira, Santiago; Castillo, María F. del & Marcuello, Chaime

Gender violence in Spain: A qualitative and systemic approach

This paper offers a qualitative and systemic approach to gender violence and its recent evolution in Spain. Spanish society has experienced a deep transformation in last three decades. We analyze the context and focus on its consequences for sex roles and gender violence. We have studied heuristically these phenomena considering the discourses of aggressors (n = 45), victims (n = 9), and professionals (n = 14) directly involved in the problem. We find “fear,” amongst other things, is the main feature of the symbolic universes around gender violence in the period after the 1/2004 Integral Protection Measures against Gender Violence Act. The different legal operators are constrained by their own role expectations and a kind of “socially shared fear”. These aspects affect the practical issues and they are partially blocked by a collection of axiomatic and ideological positions. We find that it is necessary to modify researching categories in order to understand these phenomena.

Aramburu, Leandro & Moreno-Jiménez, José María

Public policy design through the e-cognocracy. A sociological analysis of the citizens' motivation in public decision making

The Knowledge Society is the new reference frame where social relations take place. Some of their fundamental characteristics are comprehension, communication and consensus. These promote the understanding of others to achieve the coexistence in an increasingly complex world. The Knowledge Society together with the information and communication technologies (ICT) permits the citizens' participation in public decision making. Unfortunately most of the experiences in this area suffer from a minimal response by the citizenry.

Currently there is a new model in development of cognitive democracy based on internet, known as “e-cognocracy”. This model intends to facilitate the joint decision making between politicians and citizens as well as looking for an increase in the citizens' quality of life by their education. In this way, the model enables the e-involvement by the e-discussion within its own decision process. Recently this model has been proved with successful in a real-life experience in the design of public policies that took place in the Spanish municipality of Cadrete, Zaragoza.

This paper suggests a sociological approach to explore the possibilities and the difficulties implicated by the e-cognocracy model. Therefore, we investigate whether the use of ICT is adequate to establish a fluent, interactive and dynamic communication flux between politicians and citizens. In order to achieve this purpose, two main procedures are essential: Firstly, a bibliographic revision of existing studies; secondly, the construction of a methodological instrument to obtain the population's viewpoint after having participated in the model appliance in Cadrete.

Buchinger, Eva

Complex social systems and the construction of reality: “Person” between self-reference and hetero-reference

A “person” is a social attribution to human beings and therefore not an entity, but a construct. According to N. Luhmanns theory of social systems, the construct person is constituted for the sake of ordering behavioural expectations and consists at least of the following parts:

- psychic system (consciousness, with ego as identical pole) plus
- organic system (body) and persona (societal interface I) & role-set (societal interface II).

It is the psychic system which constructs and maintains an ego as identical pole in form of a self-referential process on basis of meaning. This ego is the opposite pole to all other manifold object-poles which represents the reference to the environment (Husserl!): i.e. hetero-reference. Even body, persona and role-set are object poles and therefore a matter of hetero-reference: i.e. person = self- + hetero-reference. The construct person which is attributed by one individual to another individual (“ego” versus “alter”) is to the contrary only a matter of hetero-reference. From the perspective of the theory of social systems, most of the construction of “a person” is a question of observation: one can observe him-/herself (body-, persona-, role-characteristics) and relate it to his/her identical ego pole. But the self-reference of the psychic system cannot be observed. In the perspective of the theory of social systems it is an emergent phenomenon – eventually resulting from the difference between self- and hetero-reference.

Escrive, Pedro José

Analysing decision making in socio-environmental problems with a Sociocybernetic perspective: the case of the oasian communities of Tafilalet

The paper intends to present an analysis of how oasian communities decide upon socio-environmental problems –in specific, water management- in a context of increasing scarcity of natural resources because of climate change and human pressure.

In the first part, we will study the oasian community as a complex system model in constant connection with its environment, always depending on water for its survival. In the South East of Morocco, nomad communities have been living for centuries around a myriad of little spots that share one essential element in common: water. These oasis have survived up to now mainly through a delicate and complex system of balances between population, economic activities and water, thanks to the accumulated experience of previous generations, crystallized in oral tradition. This complex system has traditionally been managed by a specific institution: the Jamaa in Arab or Takhabilt in Amazigh, integrated by the elder males of the families living in the oasis. The Jamaa has been the guardian of traditions and, also, the keeper of the delicate environmental balances of the community’s water management. The Jamaa takes decisions on the management of communal infrastructures (khattaras), however, it does not intervene when the infrastructures are private, like wells, or when the problems are being originated in a private property, like garbage or sewage

disposal even if it affects the communal water table. In recent years, the survival of the oasian communities has been endangered by the breaking off of some of the established balances of these complex systems. Particularly international tourism, has put an increasing pressure on the sustainability between oasian economy and its natural environment, but also, it has made evident the inability of traditional institutions to give an answer to these new challenges.

In the second part we present an analysis of the oasis as a complex system, considering the different elements of the oasian community: inner elements like Jamaa, hotels, associations, etc. and external elements like local and regional government, NGOs, international institutions and, specially, international tourists. We analyze how the decision making process on environmental relations and, specially, water management, has worked up to now, and how it has remained static despite the recent conflicts and problems in last years.

Through the paper, we emphasize the importance of a systemic perspective in this kind of studies. In the conclusions we refer the urgent need of restructuring the decision making process of oasian communities, enabling the institutions, traditional or new ones, to intervene in the not so private spheres that now are forbidden or forgotten for community institutions. Only a systemic perspective enables researchers –and hopefully- local actors, to understand how private actions are having global consequences for the oasian communities.

Ferreira, Ana & Lisboa, Manuel

Trust in Action

Social action is preceded by a decision-making process that connects variables coming from different systems. In each action, the social actor combines knowledge, values and social models that can be rationalized along with emotional dimensions strongly rooted in the body. Assuming this perspective, we will argue that social action cannot be explained only through the social system, or its relationship with the cultural system, but, as proposed by Talcott Parsons, by their interaction with other systems, namely the psychological and the biological systems.

Among others, Barbalet proposes that both rationality and emotions are critical for embodied decision-making, since the uncertainty, that distinctively mark these processes, prevents strictly rational costs/benefits calculations. The contingency of the future's unknowability characterizes innovation processes, where trust - a social emotion understood as secure expectations, based on past and present experiences and occurring at the boundaries of consciousness - overrides future's uncertainty allowing action progression. To start addressing the interdependence of these systems and its emergent properties and expanding our findings on the role of emotions and rationality in innovation, we'll start addressing how embodied decision-making in innovation processes are framed by the social, cultural and physiological systems and its intra-systemic and inter-systemic roots and connections. Not precluding knowledge specialization, but rather, crossing socially-constructed disciplinary boundaries, we aim to gather a deeper understanding of "trust in action".

Giglietto, Fabio

Social Actions, Uncertainty and Big Data

Our everyday decision making is often conceived as an action taken in the present, affected and constrained by the past and shaping our future. Although essentially paradoxical, this structure of time is the way systems orient themselves.

During the last few years we are witnessing a surge to new technologies aimed at storing and analyzing large quantity of data. At the same time the amount of data produced every day – let's just think of user generated content on social media - is skyrocketing. As storing data becomes cheaper, organizations are increasingly relying on their data-driven past to orient future actions. Given the unavoidable uncertainty of the future is it reasonable to believe that more data brings to an higher definition image of our past that will lead, in place, to better choices.

Not only enterprises but increasingly also single individuals are starting to adopt similar strategies. The process of continuous tracking of sleep, physical activities, weight, blood pressure, heart rate and other data is today supported by a new wave of powerful connected and often portable devices. Users can set future goals (such as a weight loss) and keep track of their progress. Data and goal sharing is often used as an additional motivator fostered by social pressure. The paper will discuss the potential effects of this trend on decision making and social actions, in light of the structure of time introduced above. Implications on both social and individual level will be addressed.

Hornung, Bernd R.

Man, motivation, and emotion at work in organizations - Behavior, Action, and Emotion in a Multi-System Environment

Modern business organizations are complex and highly dynamic systems in a highly dynamic complex environment. It is, however, the individual employee who creates products and value in such a multi-level-multi-systems environment. He is himself a complex bio-psycho-socio-cultural system.

The paper takes the example of a university hospital as a particularly complex system of this kind providing a brief outline of its properties in sociocybernetic terms. Particular complexity results from the unity of teaching, research, and health care inside a German university hospital and in some casesn from a split between private and public sector. This raises motivational and emotional difficulties for the staff, corporate culture, and corporate identity. Values at the level of the company, its members, and teams, risk to become discrepant. Possible problems affecting the individual and its work satisfaction are outlined, which may lead to the burn-out phenomenon and the loss of staff. The latter is of particular importance in a hospital, but also at the level of the health care system, where competition for patients, for nursing and medical staff is tough.

To be successful, an organization needs to replace the rational approach by a wholistic emotional approach. The theoretical link between emotional man and the wider organizational context is orientation theory, which is applicable both to organizations and the emotional system. The paper concludes with a number of

suggestions, how work satisfaction might be promoted and developed by running a business organization in a sociocybernetically informed way.

Lisboa, Manuel & Cerejo, Dalila

Sociology of emotions in contexts of risk and uncertainty: an attempt of a sociocybernetic approach through the use of emotional expression indicators

This abstract aims to reflect on several interrogations that came to us from sociological researches developed in Portugal, where it has been made clear that social actors are conditioned to act within contexts of risk and uncertainty, particularly gender violence. The actions of the social actors involved, whether they are victims or aggressors, particularly within the contexts of violent interaction, cannot be understood without shedding light on several emotional and sentimental dimensions that emerge and condition that action. Some of these actions are determinant in the production and reproduction of violence.

Accordingly, a new step was taken in order to enhance the knowledge of gender violence. This paper intends to demonstrate how victims of domestic violence, in contexts of in-depth interviews, demonstrate their emotional context, through the analysis of the emotional expression indicators. Undeniably there are specific social emotions in the experience of violent situations, particularly within the conjugal ties and the way that those emotions can condition social action. Our hypothesis is that some social emotions can inhibit and condition action towards the acts of violence. We use shame and guilt as two specific indicators to understand battered women's maintenance of violent relations and look for clues through the results of a detailed analysis of expression of emotional status throughout the interview. Assessment gestures, facial expressions and vocal tones give us indirect clues for psychological and physiological involvement, a methodology similar to Thomas Scheff's detection of specific emotions by analysis of body language: paralinguistic clues and visual gestures. It is the results of this analysis that we intend to expose in this meeting.

Loeckenhoff, Helmut K.

Justice, Justness: Balancing Ambiguity. A Case of Social Complexity to be Governed

As social and societal evolution as well as history display, semidynamics, the involvement of meaning, proved an essential factor. It acted as well as a directional driver, a constraint and a constituting force. Meaning co-determined the co-action with inner and outer environments of individuals and social groupings. Meaning shaped the social and societal behaviour by rules of social conduct, based on value systems and manifested in ethics. Anchored deeply in the understanding of 'women in their world' ethics influence self-understanding, identity, social roles; answering the old philosophical questions concerning the 'unde, ubi, quo' of mankind, and 'how to act right', to act doing justice to environments. Justice, as a basic value, constitutes the pivot to decide whether occurring decisions and events can be 'judged' as 'right'; irrespectively whether it concerns what merely happens, how one acts, and how one is treated by fate or contemporaries. In the world field 'justice', languages bear testimony, dependent from culture, of proximate values; e.g. connecting terms as

truth, honour, or appropriateness. Even if justice and its connotations qualify as cultural universals, cultural differences are striking. 'Egalité, liberté, fraternité' are as typically French as the common understanding of 'human rights' reveals as 'Western' culture compared with Asian or Chinese base values.

The distortion of central value systems as justice reflects growing social complexity mastered poorly if at all. The technical complexity induced by a technology based civilisation has been accompanied by complexity, opaqueness and non-obliging value systems responding to changing or even disappearing basic traditional meaning. As for justice, the division of power into legislation, jurisdiction and execution securing the control and balance power has weakened. In vital systems negative feed back, acting as constraining and balancing measure, has been wilfully weakened or removed. Bureaucracy and complexity are instrumentalised as means of gaining and maintaining power. A turn is neither in sight nor likely without thorough re-consideration.

Klein, Louis

Thoughts on an ecology of paradigms

The ecology of paradigms conceptualises an alternative perspective on culture. The focus is on practice and understands culture as the paradigmatic reference of a community of practice. This looks at procedures of self-observation and self-description as well as on the routines of meaning creation and sense making. The perspective brought forward is radical in its focus on communities of practice. This links to concepts of different roles people play which in this sense have different paradigmatic references. This co-existence of different paradigmatic references holds for the individual as well as for the global scale. It acknowledges professions next to religions next to youth and pop culture next to administrative procedures. Ecology, the science of co-existence, allows the synopsis of different cultures on the whole scale ranging from competition to symbiosis. The clash of civilisations happens at the same time as the co-evolution of protestant ethics and capitalism. Based on the concept of ecology of paradigms we can take a pro-active stand and cease to submit reactively to traditions and catechism. We may start to see possibilities and responsibilities which come with our practices and their paradigmatic references. And finally mind that evolution correlates with symbiosis and not with competition.

Maass, Margarita

Culture field as a complex system

Culture is in general studied in social sciences, but in this case, we are studying culture in science and humanities for the interdisciplinary development PhD programme, where we have integrated a group of five PhD students interested in developing research related with culture as a main theme and cultural practices from qualitative methods of society knowledge.

Within our group we have several issues surrounding this issue: "The field of culture in Mexico and their power struggles", "the problems of creative art workers", "cognitive restructuring dealing with technological vector", "New cultural practices in

cultural institutions". All these issues are part of this great one of culture, studied in this case as a great central system related with cultural policies in our country. Specific sub-systems with different value and processing degree, which are part of a system call "culture" inviting us to work from a methodological model on the Sociocybernetics emergence and since cybercultural perspective.

In this central System of "culture," each of the sub-systems 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. The Sociocybernetics is more like a labyrinthic approach than a straight highway with a happy ending. Therefore, this paper presents a methodology proposal that, from the main features of general systems theory proposed by Rolando Garcia (2006) in his Theory of complex social systems, based on Piaget's constructivism. He shows us how these investigations are forming a complex interrelated empirical Sociocybernetics working as an interdisciplinary research.

Although, it has fully entered the XXI century, we are still at the beginning of the emergence of interdisciplinary research and starting to think more specifically from systems theory and from the second-order cybernetics or Sociocybernetics. Authors like Jesus Ibáñez (1990), Rolando Garcia (2006), Prigogine (1993), Von Foester (1991, 1992, 1993), Watzlawick (1989) and Berthelot (1990), among others, help us to think about it. We could say that the interdisciplinary constructivist invite us to read, watch, and work complexity in social problems, to "emerge" from the complexity and enrich new perspectives from different ways of organizing in order to produce knowledge and better answers to such social problems. (I use the concept to emerge from the sense described by Varela (1990).

Marcuello, Chaime; Aramburu, Leandro; Doria, Andrea & Flores, Lorena Digital Generations, Identities And Social Movements. A Conceptual Framework

The generalization and extension of the Internet has changed our world and our societies. It is a structural transformation in micro, meso and macro levels where new social habits are modifying the economies, the processes of thinking even the way of loving and, mainly, the political arena. Information and Communication Technologies (ICT) are formatting the social systems. These ICT and the endless new devices introduce a "radical mutation" in people, organizations and daily life. Now, at the same time, analogical social system and hard societies overlap digital generations and soft societies. In any case, we are moving globally to a different scenario.

ICT are defining new spheres and horizons in political interaction spaces. The customs and theories about traditional political representation and political identities are altered as a consequence of this change vector. This paper explores, firstly, these ICTs and their contextual consequences. Secondly, proposes a theoretical framework to conceptualize and describe the effects of the "internetization" and "digitalization" of our lives and, specially, its effects in the emergence of social movements. And thirdly, we describe some conceptual milestones to understand how the digital generations are building a social architecture where the emotions and meanings are supported on a different way of doing and thinking.

Medina, Pedro

Why are we still here?

In spite of the countless attempts at erecting a long time predictable theory of humankind's evolution – particularly from his historical and social perspectives - the whole of such attempts have so far failed. From the reasons that justify this situation three are especially striking: (a) The complexity of the phenomena under scrutiny - entailing either the uncontrollable events that until now have threatened Earth (like asteroids' impacts) or the aggressiveness and violence intrinsically rooted in ourselves, (b) the unthinkable era we are presently undergoing, rendering any forecast practically meaningless and (c) the fact that a great deal of the variables and parameters that (eventually) would be used to erect such an endeavored mathematical theory have no measurable, quantitative counterpart (in a classical, physical sense).

This paper aims at solving part of these questions using a novel, fresh tack based on three main assumptions: (i) Gordon Pask's Conversation Theory (albeit partially modified by myself), (ii) the influence that unconscious 'mechanisms have had throughout time in humankind's fate, and (iii) the use of the so-called Fuzzy Cognitive Maps that provides a formal, mathematical base upon which the significant narrations of the historical/social evolution of humanity rests.

Mesjasz, Czesław

Equilibrium, stability and turbulence: How physics has shaped and limited economic thinking

The impact of physics onto economic, finance and management has been exerted in four ways. Firstly at the ontological and epistemological level by attempting to make economics in a "scientific" way. Secondly, by applications of physical models in the cases where a sufficient amount of data could be collected. Thirdly, by using models plus their phenomenological interpretations, and fourthly, with the use of analogies and metaphors applied in studies and policy making. The transfer of ideas from physics to economics and other social sciences can be illustrated with applications of five concepts – equilibrium, stability, turbulence, complexity and chaos. Although the above notions are widely used in economics, finance and management yet methods and influence of their applications are not sufficiently deeply analyzed. Their applications may lead to simplifications, sometimes artificial impression of normative "objectivity", and even to scientism. The aim of the paper is to show how the ideas of equilibrium, stability and turbulence were transferred from mathematics, physics and control theory to economics, finance and management. Special stress will be put on the impact of mathematical models and metaphors associated with equilibrium, stability and turbulence on the discourse in economic theory and practice, since the incomprehensibility of contemporary economy is often linked with constraints imposed by those ideas on interpretations of phenomena in economics, finance and management.

Oner, Ilknur

Complexity of Recent Disaster and Migration Patterns of University Students: Thoku-Japan And Van-Turkey

Since Weiner's discussions on cybernetics in 1940's, discussions have come a long way, but they are still in need of coverage of experiences such as earthquakes tsunamis, nuclear disasters. Social media, internet censorship and ongoing scientific literature in written and visual forms are revealing unseen to us in shorter times than before. This frame requires increasing awareness to catch up the speed of the events. The focus of awareness requires certain attentions to available, expected and unexpected patterns, size, complexity, coverage and impacts of the events. Earthquakes, their impacts and migration are contemporary discussion topics in Thoku-Japan and Van-Turkey.

This study explores university students' experiences of migration on the base of encountered disaster phases. Main intention is to understand the combination of disasters and migrations from their control and out of control, voluntary or involuntary appearances. Intentions are not keeping both countries' experiences, societal structures and their ability to act as equivalent, but rather to understand phases of disasters and migratory patterns from traced examples of university students' experiences. Thus, study intends to take attentions to unseen migratory patterns and disaster victim students and necessity of awareness of their presence and preparedness for their needs at their universities.

The findings on Japan will be the results of evaluations of traced general literature and web pages of selected universities without segregation to be at the epicenter or distance to the disaster location. However, derived findings related to the Van quakes in Turkey and their evaluations will be basing on literature, newspaper content analyses, observations in general and findings on Firat University students. Long term follow up in depth study is postponed due to necessity of longer talks on the account of students' psychosocial conditions. Preliminary results of analysis derived from target group meetings over 170, interviews with 25 students and registration records of over 250 students from Van will be presented here. Elaborations will be in comparative setting.

Pires, Edmundo Balsemão

Double Contingency reexamined - Agents and Agency according to Luhmann's Theory of Social Systems

Sociology and Economics shaped the notion of "Social System" from what seemed an unquestionable starting point in the motivation of individual agents provided with a capability to plan complex courses of actions conditioned by rational purposes. This idea is now criticized and became questionable. The discussion of the cognitive basis of the agency and the discovery of non-conscious dimensions in human action proved that the idea of a continuity and conscious transparency between the agent's representation of the action's goals and the actual sequence of the actions in the world is disputable if not entirely false.

The concept of the individual agent separated from groups, institutions or communicative underpinnings and unique responsible for a program of action is a fiction difficult to maintain in the actual state of the social research. The economic models that started with the individual will of the “rational agent” to describe the economic equilibrium of the markets and the aggregate variables, inattentive to social contexts of communication, need also a revision, today. In my presentation I’ll propose a critical evaluation of both sociological and economic backgrounds of the “methodological individualism” in the social sciences. My paper will provide a central place to N. Luhmann’s analysis of the problem of the “double contingency”.

Raven, John

Advances in mapping, measuring, and harnessing the complex network of social forces which lie behind the functioning of the “Educational” system... and have the future of humankind and the planet in their grip

By the time Figure 1 was published (in 1995) it had become clear that the central “governance” – socio-cybernetic sub-system - in this wider system (see box to the right of centre in Figure 1) had to be re-designed along non-hierarchical, organic, lines. Indeed, it was already clear that the hierarchical design of our so-called “democratic” systems was driving us toward our extinction as a species. The very idea of trying to design an alternative socio-cybernetic system for the management of society was questioned by some members of the UK group SCiO. They argued that, instead, it is necessary to allow a new system to emerge from the kind of activity that can be observed in some classrooms and organisations. Unfortunately, precisely these developments are eliminated by the network of systems forces depicted in Figure 1.

The (re) publication of Bookchin’s *Ecology of Freedom* forcefully underlined the importance of studying the social forces shown in the sub-system box (labelled sociological demands) on the right hand side of Figure 1. This sub-system has the survival of our species and planet in its grip. Our own earlier sketch of the forces operating in this system is given in: <http://www.eyeonsociety.co.uk/resources/diagram%2020.6.pdf> Mapping this network would be an enormous task ... and one which could not be accomplished without substantial external funding ... especially as it is clear that the value of the work would depend on the quality of the resulting map. Assistance in obtaining the necessary funding has therefore become a priority.

Rueff, Maria do Céu

Leges Artis and assisted dying

In this paper I will analyse medical performances at the end of life, and confront them with the responses of Portuguese Criminal Law. I will cross the criminal doctrine with a broader, interdisciplinary approach, including the reconsideration of medicine ethical tradition (notably the Hippocratic Writings) and the present developments in neurosciences. The “transition from an automatic homeostasis to a deliberate homeostasis” (Damásio, 2003) helps me to clarify to which extent the medical act – according to the *leges artis* – rather than a legal construction (or need for changes in the legal frame) becomes the centre of the whole problem. Indeed, it is within the medical act, understood as the encounter of two autonomies – patient’s and doctor’s

autonomies –, that the “deliberated homeostasis” takes place, as a result from the compromise between the patient’s will of ceasing her/his life and the doctor’s duty to relieve suffering. The principle of “compassion” plays here a decisive role.

An integrative perspective of Medical Law, by recognizing and exploring the structural connections between medical system and legal system, will certainly incorporate all situations of compassion at the end of life, in order to comprise a broader spectrum of cases (including the so-called “active euthanasia”). Such perspective has been already opened by the Portuguese neurologist João Lobo Antunes (2010), who invokes the so-called principle of mercy, or compassion, “which is not in fact synonymous of beneficence”.

Scheff, Thomas

Looking Glass Self, Depression, and Violence: A Cybernetic Theory

This paper reviews the work of Goffman and Cooley in order to outline an interactionist theory. Is shame the force that leads most people to conform to social conventions, but under certain conditions, to withdrawal or violence? To explore this issue, it is first necessary to define what is meant by shame and pride, since there is confusion about the meaning of these terms, especially in the English language. The meaning of the concept of alienation is also reviewed. Empirical studies by Norbert Elias and Helen Lewis seem to support the idea that shame is the master emotion in modern societies. Another feature of Lewis’s work is the recognition of the social character of both pride and shame. Her work also may be used to develop a cybernetic theory: shame can act back on itself or on anger, leading to feedback loops that have no natural limit. A runaway shame loop is most likely to end in depression, or less likely a shame/anger loop, “humiliated fury,” in violence.

Scott, Bernard

Minds in Chains: A Sociocybernetic Analysis of the Abrahamic Faiths

The central concern of this paper with how humanity can cope with the many problems that require a global, coordinated response. Using concepts from sociocybernetics, I have argued elsewhere that the problems are inter-related and need to be tackled holistically. I have also discussed the requirement for ‘education for enlightenment’, one that would facilitate concerted action on a global scale. In this paper I address the troubling matter of ‘pathological belief systems’, which I have previously defined, following Pask, as those that ‘restrict the right of actors to interact’. As examples, I consider the tangled ‘Gordian’ knot of beliefs that constitute the Abrahamic faiths: Judaism, Christianity and Islam. It is my belief that an analysis based on well-defined sociocybernetic principles can help cut through this knot and lay bare just what is pathological. The attraction of such an analysis is that, whilst it requires at least a broad brush stroke understanding of the central tenets of the three faiths, their similarities and differences and their intertwined histories, it does not require one to pass judgements and ‘take sides’ with respect to the major controversies that divide the faiths, except with respect to the extent to which they do or do not incorporate the possibilities for an education for enlightenment. More generally, a properly formulated sociocybernetic analysis does not require one to

pose any fundamental opposition between 'science' and 'religion'. What the analysis can do is help identify what are the key differences between 'science' and 'religion' as routes to knowledge and understanding, whilst noting that there are 'undecidable questions' about which an individual should be permitted to formulate her own beliefs without opposition or condemnation from others.

Simon, Karl-Heinz

Transformations of or in social systems – what elements are changing and how?

There are recent attempts to explain societal transformation processes. Starting point is the application of classical cybernetics concepts (type Ashby) describing a state of the system at the beginning of the change process and a state of the system after the transformation act. The connection between start and end stages are the translation measures and those operators that are responsible for bringing forth the new system state.

In addition to the four elements mentioned above, further differentiations are that between open and closed transformations. Closed transformation processes are deterministic in character and describe a "transformation mechanism", a machine. Open transformations focus on a selectivity of elements that are used in the transformation process – others are ignored – and on the appearance of new elements. The crucial question is: what does that mean "appearance of new elements"? And a second one (as Dirk Baecker asked recently): Is it possible to keep control over the transformation process?

Baecker suggested to "de-trivialize" the concept of transformation and to focus on endogenous elements in the transformation. Similar to the concept of the non-trivial machine of von Foerster obviously such a transformation process (a) cannot be determined "unambiguously and completely" from outside the system. (b) A second important suggestion is to situate states of the transformation process in the centre of attention (and not the start and end stages). Hence, a society is labelled as transformation society if certain elements are classified as un-sustainable, and others as sustainable. However, both types of elements seem to be part of the society and are not emerging as new components.

Xu, Ying & Lang, Graeme

Major Factors facilitate the Environmental Protests in China: A Case Study of Liulitun Anti-incineration Campaign in Beijing

Given the fact that China is in a period of rapid transition and environmental protests are on the rise, this study has set out in search of the structural factors of the protests by drawing on the findings from the case study of the Liulitun anti-incinerator campaign in Beijing. Applying the second-order sociocybernetical approach, the findings indicate that motivations, confidence, tactics and outside resources are the main factors of the environmental protests in China. It is also noted, as long as the loose-organized environmental activities are unlikely turning into a source of pressure for policy change, the independent successful protests contribute little to the environment protection and the environmental justice.