

# Preface

This volume is the result of a scientific collaboration, in the field of social systems, among experts from “Alexandru Ioan Cuza” University of Iași (Romania), “G. d’Annunzio” University of Chieti-Pescara (Italy), “University of Defence” of Brno (Czech Republic), and “Pablo de Olavide” University of Sevilla (Spain). Following a postmodern approach, the authors provide theoretical perspectives and practical models regarding both social and economic systems. Qualitative and quantitative approaches are used by the authors, according to their expertises and interests. The heterogeneity of the contributions developed in this volume reflects the variety and complexity of social phenomena; thus, the topics deal with tools for the interpretation of socio-economic systems, potential strategies for social planning, and contextual analyses for decisions and control. The book is divided into four parts: recent trends in social decisions, recent trends in social systems and control, trends in quantitative theories and models, and finally, integrative theories and models.

The first part deals with the recent trends in social decisions and their driving forces.

From a socio-anthropological perspective, religious beliefs and superstitions can influence people’s behaviour. The study of Nicu Gavriluță is based upon two pieces of sociological research carried out by the Romanian Institute for Assessment and Strategy. This study intends to show and interpret the contemporary beliefs of the Romanians about the meaning of life and death. The primary focus of the article is the beliefs of the Romanian people in 2013 concerning the importance of the church in their personal life and the answers that the Church gives to certain social issues: infidelity, the third world, racial discrimination, ecology, religious tolerance, abortion, nuclear disarmament, euthanasia, unemployment, or homosexuality. The last part of this study analyses contemporary superstitions in the Romanian social mindset, particularly centred on witchcraft and fortune telling.

Mihaela Rădoi and Adrian Lupu investigate the perception of institutional trust in the health system, starting from the study of Hardin and Fukuyama, where societies are divided into high-trust and low-trust societies. The article draws attention to the significant difficulties in defining and measuring the levels of trust;

indeed, trust has only recently begun to be measured and analysed in the health sector, and almost, no empirical investigation has been conducted in developing countries. In this study, the authors have used PubMed database and the health-related reports of the European commission.

In the paper of Gabriele Tomei, it is highlighted the link between the current direction of migration flows in Italy and the post-Fordism globalization that pushes an increasing number of highly qualified youths to leave the country in order to insert themselves in other European knowledge economies. Using Foucault's theoretical analysis of biopolitic, the author argues that the new highly qualified emigration flows from Italy during the recent economic crisis have been influenced by means of keywords that convinced people to comply with the rationale of economic calculation.

Romeo Asiminei focuses on two directions of analysis: the political asset and the electoral asset of Romanian diaspora in the context of post-communist presidential elections. The political asset is understood as political participation. The electoral asset is understood as the distribution of votes to the electoral competitors. In this context, the paper explores a series of variables and raises different hypothetical questions: "Is the diaspora vote a competent one?" and "What is the impact of the votes cast from abroad on the election outcomes?"

The paper of Valentina Savini deals with the relationship between microcredit and quality of life. She intends to analyse the quality of life as an indicator of the access to the credit of the "non-bankable", i.e. those who do not possess the minimum requirements to apply for a bank loan. The object is the relationship between the presence of microcredit programmes on a given territory and the social impact that these programmes have in terms of purchase or achievement of a self-autonomy by the individual, as well as the achievement or recovery of a full member status of the community, that was unreachable due to poverty conditions or was previously undermined.

The contribution of Šárka Hošková-Mayerová and Radovan Potůček deals with the qualitative and quantitative evaluation of the entrance draft tests of mathematics for aspirants for the bachelor and master study on the Faculty of Military Technology of the University of Defence. These tests have been organized by the Department of Mathematics and Physics since 2010. The paper gives information about the history and contents of these draft tests, about the rate attained by the aspirants for the study, and about the rate of single type of test examples and analyses these from the qualitative and quantitative point of view in the period of the last five years.

The work of Vincenzo Corsi has been put in evidence the fact that social planning is founded on theoretical and methodological importance in the field of applied sociology. In applied sociology, concepts, theories, models, and patterns of explanation are used for the study of social phenomena. The methods of social research are designed to identify, describe, and explain the social needs of individuals, groups, and communities. In particular, the methods of analysis of social needs and building models of local welfare in Italy are described.

The contribution of Barbara Ferri deals with some orientations for impact analysis within the process of urban regeneration, based on the guidelines of the European Structural Funds 2014–2020 aiming at regional development policies which are more focused on desired results and place-based approach. The paper underlines the need to strengthen the connections between urban/territorial planning and decision support systems. In particular, starting with a review of the concept of social sustainability, the paper outlines some of the main indicators existing in recent European studies for urban regeneration, so to identify the impacts of the interventions and defining suitable decision-making processes to guide policies.

The strategic voting across families of various electoral systems is often depicted as “settling for lesser evil” in order to prevent the worst outcome of elections. Roman Chytlek and Michal Tóth experimentally explored the degree of strategic voting (as compared to non-voting) framed in situations with (non-compulsory) costly voting where voters face outcomes with positive and negative pay-offs and/or with solely negative pay-offs.

In the second part, the analyses move from individual to the socio-public sphere, underlying recent trends in social systems and control.

Sabrina Speranza highlights the links between social communication and public values, showing how their relationships are physiological when they retain their identity and function independent; they are pathological when they claim for submission and exploit and corrupt by using power or money. Recent laws are not helping innovation, but consolidating old rents. Spaces between information and communication skills are increasingly blurred. Social communication is not a sector of activities, and it is a value choice based on an extended, interdependent ethical awareness of all social system. Finally, she concludes that social system is guaranteed by the truth of information and by ethical value choices of communications.

Cristina Gavriliuță analyses three scenarios for the academic study of religion in the modern context. She shows that regardless of the manner of approaching the religious element, there are sufficient reasons to believe that the academic study of religion has a “use value”. Although no spectacular mutations would be obtained at cognitive and behavioural level, the simple religious familiarity and knowledge of the religious field allows a more profound approach of reality. She concludes that the academic study of religion could offer young people the chance to discover, know, and respect other person’s values.

Marius Liviu starts from an analysis of secularization as a broad phenomenon of modernity and wonders whether his purpose, the disappearance of religion, is still true. He states that Christian religious traditions have been a source of public reason, and today, they must translate their values in a secular language. The author deepens the debate on the role of religious traditions in Europe, related to entering values in public reason. In particular, the role of the Romanian Orthodox Church had deepened.

The report of Gabriele Di Francesco provides the setting for a research on bullying in educational establishments, on a population of students aged between 6 and 18 years into three levels of education: primary (6–10), middle (11–13), and secondary schools (14–18). The analysis pays attention to dynamical aspects

inherent in the structure of the organization in which this phenomenon arise, school climate, and dynamics of the youth groups within and outside school.

The paper of Adina Rebeleanu and Daniela-Tatiana Soitu aims to understand the universe of non-contributory social benefits based on financial means testing beneficiaries and the subjective meanings in regard to social care services access determinants. Synthesizing the analysis of social benefits based on financial means testing beneficiaries' perceptions, they observe that their way of relating to the healthcare system depends largely on the lack of incomes.

Visual interpretation of satellite data is a new trend of obtaining geographical information for the common populations. The purpose of the study of Hana Svatoňová was to investigate, analyse, and compare the efficiency of reading images and maps, the ability of adolescent children to read images in relation to colours used, and the subjective opinions of research participants on the difficulty of reading various types of images and their preference for images or maps as a source for acquiring information.

The report of Engin Baysen, Šárka Hošková-Mayerová, Nermin Çakmak, and Fatma Baysen provides the results from a research aimed at revealing citation misconceptions of Czech and Turkish university students. Plagiarism is an unethical behaviour which decreases research trustworthiness and also harms related subject area. Therefore, it is also a big problem for the future of science. The research revealed that students have misconceptions concerning providing citations. Thus, it is not possible to attribute students' plagiarism action only to intentional behaviour but unintentional as well. Students are more vulnerable to plagiarize in some plagiarism types while less in others. Cultural differences influence plagiarism types and degree of plagiarism risks.

The work of Consuela Torelli deals with the analysis of social tourism as a mean through which was rediscovered a new identity, the identity of twenty-first century man, who is fragile and frustrated by the continuous stress brought by the quotidian life and by his or her job.

A new hybrid social theory on emergentism is developed by Raffaele Mascella, starting from the higher level property of "no vacuously weak", specified in terms of both the manifest and latent powers of its constituents. After the exploration on whether the belief in emergentism is justified and possible, the author motivates why no vacuously weak emergence seems to be a valid candidate. Then, he argues that this structural variety of emergence is explanatory reducible, but it is not ontologically reducible, to its lower level composing elements, and he concludes that this could be the variety that secures a consistent hybrid social theory.

The third part focuses on new perspective in quantitative theories and models. New mathematical tools are presented for modelling complex social phenomena.

The paper of Antonio Maturo and Šárka Hošková-Mayerová starts from the idea that in social sciences, there is many times uncertainty on the result of an aggregation operation and on the degree to which a relation holds. Thus, the authors propose the algebraic hyperoperations that permit to consider together many possible results of the interaction of any ordered pair of elements and fuzzy sets that give the possibility to measure the degree of belonging of an element to a set

described by a linguistic property or the degree of a relation between individuals. They show some possible applications to social science to give an efficient tool for modelling social phenomena.

Fuzzy events as tool for simultaneously handle the probabilistic and semantic uncertainty in economic and social contexts are considered in the paper of Antonio Maturo and Fabrizio Maturo. The approach generalizes the subjective probability by de Finetti. Assuming a particular algebraic representation, new definitions of fuzzy event and fuzzy probability that generalize conditional event and conditional probability are proposed. Moreover, some applications in social science, in particular in decision-making under uncertainty, are presented. Some possible extensions of such concepts, defining fuzzy event and fuzzy probability of type 2, and possible applications in social sciences are explored.

Fabrizio Maturo and Šárka Hošková-Mayerová analyse the different types of inaccuracies that can afflict the data; in particular, the reasons that lead to the use of fuzzy logic are introduced. They show the limitations of classical regression models that lead to introduce fuzzy regression models. Different types of fuzzy regression models are considered. Because in totally fuzzy linear regression the usual operations between fuzzy numbers lead to a considerable increase of the fuzziness, fuzzy operations to overcome these issues are introduced.

Cristina Flaut studies some connections between Hilbert algebras and binary block codes. She emphasizes how, using binary block codes, it is possible to provide examples of classes of Hilbert algebras with remarkable properties, in particular classes of semisimple Hilbert algebras and classes of local Hilbert algebras.

In the paper of Penelope Kambakis-Vougiouklis, Pipina Nikolaidou, and Thomas Vougiouklis, the class of hyperstructures, called  $H_v$ -structures, has been studied regarding several aspects as well as in connection with many other topics of mathematics. Applications obtained from social sciences, mainly the ones using questionnaires, as in linguistics, are presented, and the use of the bar instead of Likert scale is proposed. The results are formulated in order to become  $H_v$ -structures that appear as a new mathematic tool for advance study in linguistics.

The paper of Fiorella Paone focuses on the need to use systems of analysis able to supervise socialization processes at school, specifically on the influence that new communication technologies have on knowledge construction, elaboration, and transmission of students. She shows a mathematical model with the mean influence rate of each communicational standard on cultural system of students and presents the definition of a class cultural situation on which the model has been tested with the goal of a formal validation.

Andrei Holman and Adina Karner-Huțuleac stress the importance of the media as a source of information on organ donation and transplantation for the general public, affecting people's relevant attitudes and behaviours. The study focuses on Romanian press portrayals of the psychological experiences of people involved in organ transplant cases, either as recipient and donor or as one of their family members. Psychological states are represented as multilayered and frequently

polarized across the narration and the protagonists, focusing on the organ recipient as the main protagonist of the psychological journey that the transplant entails.

Adrian Netedu analyses the trend of demographic evolution in Romania in the beginning twenty-first century; in particular, he shows the negative growth of the population due to the migration trends, the low level of birth rate or fertility, the great infant mortality rate, the general trend of population ageing, and other aspects. He aims to identify whether there are some specific demographical situations and whether Romania is integrated in an East European demographic model with the same threats and weaknesses.

Vanessa Russo focuses on the technical innovations in the passage from the birth of the Web and the 3.0 and studies new paradigms as Lovink's mediactivism, Castells' network affinities, Levy's collective intelligence, and the Barabasi model of small aristocratic world. She also analyses the affinities networks, which are related to the theme "city of Chieti".

The fourth part focuses on integrative theories and models.

Cristina Flaut and Daniel Flaut present some diplomatic ciphers from the seventeenth and eighteenth centuries, particularly used in the Romanian Principalities, emphasizing their similarities with the ciphers used in Europe in that period.

The different means of terms of Logos in Greek philosophical context and in Christian theology are the object of the paper of Rodica Pop. It claims that the concept of Logos was used in philosophical interpretation of the Christian faith, being a constituent of faith. It also states that when the Saint John says that Jesus is the Logos, this is not a philosophical statement, but one religion.

Eronim-Celestin Blaj deepens the theme of morals as social therapy. He starts from the original work of the Romanian scientist Ștefan Odobleja, *Psychologie Consonantiste*, first published in 1938–1939, in Paris, that offers us a moral conception grounded on the consonance, social solidarity consciousness, wisdom, equilibrium, and respect. This approach focuses on the theme of moral character as it has been conceived by the precursor of cybernetics, precisely throughout the laws formulated by Odobleja himself: the equivalence, compensation, consonance, and reversibility laws.

Ethical influences upon social systems and decisions are considered by Alexandru Victor Pricopi that focuses in gnostic libertinism and gnostic views on ethics. Church heresiologists and many modern scholars believe that the members of the Gnostic movements do not give any importance to ethics in their systems. For them, Gnostics are either ascetic, or libertine, but Coptic Gnostic texts from Nag Hammadi show us that some Gnostic movements give an important role to facts in the process of salvation. In the paper, he observes that many modern researchers have highlighted this aspect and have dismantled this stereotype and proposes to expose some problems raised by the Gnostic libertinism.

Some social models are designed to integrate research and evaluation in social planning by Camillo Stefano Pasotti and Francesca Pia Scardigno. They observe that a new partially innovative theoretical dimension of decision-making process is required to be built, with the aim to recognize a "residential identity" of individuals, communities, and even institutions, allowing the best reciprocal communication

about a desirable future for the necessary political response to emerging social needs. “Fluent Evaluation” is the proposal of this new way to read, analyse, and operate through residential identity and reaching for the best efficacy on the new challenges of social policies.

Trajectory modelling to behaviour analysis and social habits are considered by Donatella Gubiani and Marco Pavan. They describe considerable results related to the analysis of mobile spatial–temporal data, focusing on the study of social habits and behaviours, and provide a general perspective for studies on human mobility by depicting and comparing methods and algorithms, highlighting some critical issues with information extraction from spatial–temporal data, and future research directions.

Franco Blezza proposes the “clinical” method as a possible choice for pedagogy as a profession and as research for the social science and other sciences. It can also be called “causistic method and situational” and is an alternative exclusive to statistical and operational method in the community full of scientific rigour and technical applicability. Particular consideration is given to the technical specification for the transition from the particular to the general provided only through the mediation of a professional. He exemplifies the four fields of application of the pedagogy professional with strong preferences to interdisciplinary and interprofessional.

María A. Perea-Mediavilla and Javier López-Cepero deal with expectations towards animal-assisted interventions and improvement on quality of life. Although animal-assisted interventions (AAI) have gathered a solid empirical background as an effective complement to social, educational, and health professions in order to enhance quality of life, Spanish-speaking countries are just starting to pay attention to possibilities they offer. Wide statistical survey and a careful analysis of the data are presented. Triangulation of information between different actors, as well as between two complementary levels of analysis, warranted solid conclusions that should serve as a guide to keep developing AAI in Spanish-speaking countries.

In the paper of Luigi Mastrangelo, the complex relationship between literature, politics, and society is discussed, explaining how literary works can constitute an effective interpretative key of the sociopolitical scenario, assuming you subject them to thorough analysis and culturally appropriate under a point of methodologically. The literature arises in the social and political scenario because its object must be in situations and in social dynamics arising from the relationship between the characters. He claims that the books, in order to be properly interpreted, are to be contextualized ranging from ideological problem, which needs to be addressed from two points of view, objective, and subjective.

The work of Giselda Antonelli, Roberta Di Risio, and Giovanna Di Felice shows how the spread of digital communication technologies has led to substantial changes in individual behaviour, in many newspapers, and in collective practices. The social sciences detect the change by analysing the strengths and weaknesses. This paper aims at presenting the educational offer of a master, addressed to the training of teachers experienced in teaching communication by proposing a blended

methodological approach that combines the teaching laboratory with the a critical and expert use of new technologies.

The papers collected in this volume are addressed, in equal measure, to sociologists, philosophers, mathematicians, statisticians, people interested in ethics, and specialists in the fields of communication, social, and political sciences.

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