Preface

Ethics of research and innovation has become a particularly important field in recent years, a particularly important component of any research project, ethical dimensions refer to very varied categories of practice, from the protection of human subjects involved in medical and social research to ethical standards for the publication of results research. The destructive capacity of the current technology requires an ethical approach, balancing the value of the results with the risks involved by the research - on the one hand, but more recently with the estimation of the possible consequences that the implementation of the technologies resulting from the innovation research can have for the subjects of the research, respectively for the local or the global human community, going to radical mutations in the existence and becoming of the human species.

Ethics is a term derived from the Greek "ethos" – manner, habit, character, and it designates a philosophical discipline that studies the theoretical and practical aspects of morality. In current language, the term ethics is used synonymously with that of moral.

The applied ethics aims to discuss the ethical specific features of some controversial and difficult aspects of contemporary life, whose management cannot be achieved exclusively through the theories of classical philosophical ethics.

Ethics of research and innovation, as a particular dimension of applied ethics, is a transdisciplinary approach par excellence, requiring knowledge both from the general sphere of ethical theories, as well as from the particular field of science in which it is exercised. Among the specific themes considered in the approaching of the ethics of research and innovation, which we find in this volume, we mention:

- Ethical value of knowledge;
- Ethical limits of knowledge;
- Responsibility towards the Other;
- Research on human subjects, limits and ethical risks;
- Normative perspectives in research on human subjects: Oviedo Convention, Belmont Report, Helsinki Declaration, Council of Europe Directives etc.;
- Principles of research on human subjects (principle of non-maleficence, principle of beneficence, principle of justice, principle of promoting the autonomy);
- Ethics of science publication and communication;
- Ethical principles in conducting research;
- Ethical perspectives in the design of the research project; Ethical approval for research; Standards and procedures for obtaining informed consent; Protection of research participants; Data management; Conflict of interests; The responsibility of the researcher and the research institution;

- Ethical misconduct in research: plagiarism, forgery of data, ghost writing;
- Research involving vulnerable populations;
- Consent in research;
- Research Ethics Committees;
- Ethical perspectives on the use of medical technologies;
- Medically assisted human reproduction;
- Experiments on human embryos;
- Ethics of technologies with a major impact on lifestyle;
- Ethics of Artificial Intelligence development;
- Ethics in research in the natural and life sciences: genetically modified organisms.

THE CHALLENGES

Abusing ethics and turning it into a coercive system turns ethics into its opposite, a witch hunt, ineffective in promoting good practice in research.

The establishment of ethics of scientific research and of innovation is predominantly happening with the purpose of avoiding malpractice and derived sanctions, and not from truly instituting social responsibility. Social responsibility is a legitimate structure used for image purposes, and less a true adherence to ethical values.

In our opinion, the integrity is narrowly understood by many researchers and even by some institutions involved in the ethical regulation of research and innovation, and it is predominantly reduced to its negative latitude, which prohibits the obtaining of undue results from the exercise of various activities in the field of production and communication of knowledge, creating a partial confusion with the ethical compliance dimension, as it develops tools for controlling non-conforming behaviours, called integrity control. Incorrect conduct in research may be based on deliberate fraud, but also on honest errors that the researcher was unaware of, or questionable practices in research, among which the most frequent are the publication of poor works, negligence and superficiality in contouring and developing the research, in using the research procedures, in developing the critical apparatus and in citing sources, uncorrected errors, etc.

Unfortunately the ethical discourse in the sphere of research and innovation is of a reactive nature, being generally concerned with the increasing reported number of cases of unethical conduct and with an attempt to universalize the retributive character of ethics. We are in favour of an ethics of research based on a clear and effective normative construction that facilitates the voluntary adherence of members of the academic community to the values underpinning ethics in research and innovation, among which we consider that the dignity - of human being a swell as of humanity in general -, the honesty, the trust, the respect for the person, the autonomy of the participants in research, the transparency, the equity, the equal opportunities, all these hold the place of honour.

SEARCHING FOR SOLUTION

Epistemological perspectives gain an ethical sense in the context of *trusting* the results of the research. The principles of research ethics: benevolence, non-maleficence, respect for the autonomy of research

participants, justice, should be the basis of the conduct of any person engaged in research or innovation, adhering to these principles and to others alike, generally valid or specific to each particular field of research being the guarantee of honesty and proper demeanour.

The truth, in the context of new epistemologies of post-positivist nature, acquires ethical significance in correlation with the methodology of science and research. Scientific research is considered to be burdened by the subjectivity of the researcher, but in the same time this will impose on him the ethical responsibility for the social significance of the research, the correctness of the use of methodology, the honesty, the presentation of the limits of research, including the epistemic and methodological ones, and for the needs of the subjects involved in the investigation. Collaborative creativity and peer review are both elements of ethical valence. Collaboration and collegiality imply an affirmative ethics, an assumption that the Other - the colleague, the financier, the reader - is not only equal to me, but also a resource without which my own research would become impossible and useless.

Deontological norms should have as basis an ethical value, to translate it into a moral maxim. The Kantian model provides such value, namely the human dignity, which is transposed into the moral principle in the form of that second formulation of the categorical imperative, which claims to treat a human being as an aim in itself and never as a means. The fulfilment of this imperative requires the individual's ability to rationalize his behaviour in such a way that his own moral norm can stand as a moral maxim for others.

In the Kantian vision, the moral subject must have the capacity to build its own moral norms, and to act in such a way that they can be considered universal maxims, integrity is the consistency in the implementation of these own moral norms, while autonomy is the capacity of the subject to establish such rules. Integrity - in general, in research and innovation in this work - is synonymous with honesty and fairness, being a conduct opposite to hypocrisy, falsity, inconsistency. Integrity aims to express personal virtues in research, especially compliance with standards, that governs a certain area of research and innovation. Integrity is usually analysed from the negative perspective, insisting on the need to control unethical conduct. In the framework of affirmative ethics policies in the field of research and innovation, the emphasis is on integrity as a virtue, and on the promotion of integrity in the organizational environment and its internalization.

The affirmative perspective of integrity refers to the individual's efforts to maintain consistency with himself and his own authenticity. Lack of integrity leads to a non-authentic behaviour in the sense that the individual can no longer be coherent with himself from a moral point of view. In order to properly assess the integrity of a person or organization, it must be taken into account the system of values and principles that govern ethical behaviour. In the absence of a research ethics policy at the researching organization level, or of a specialized in technology for the transfer and implementation of innovation one, as well as an ethics management system at the Organization level, we cannot speak of integrity because we cannot relate the behaviour of the individual with a pre-existing normativity.

We believe that applied ethics, the ethics of research and innovation in the particular case of this written work, should avoid its perpetual positioning within the purview of legitimizing the social action through values such as *moral responsibility, social justice or equality*. Ethics of research and innovation should represent the horizon of *excellence* reconfiguring the idea of *professional virtue*. We make a distinction between minimal ethics (minimum acceptable standards for socio-professional activity) that act negatively, in a prohibiting way and affirmative (appreciative) ethics that aims the professional excellence by codifying successful experiences in professional standards.

The work brings together some of the main themes of ethics in research and innovation, which will allow readers - researchers, but especially researchers in training, to acquire the standards of their own type of practice and thus avoid any voluntarily, but especially involuntarily unethical behaviour, which may arise from ignorance of the ethical meaning of the type of research the researcher is involved in.

The volume could be used as a research ethics manual in doctoral schools, research masters in fields such as biomedicine, technology, and social sciences. We hope that the volume will contribute to the unification of ethical practices in the field of science and technology through the mutual transfer of know-how between relatively separate research areas through the unitary understanding of the ethical significance of research and good practice, especially in terms of publication, avoiding misconduct and assessing the possible impact that research can have on the results. The handbook can help ethicists, members of the ethics committees, counsellors of ethics and ethics consultants as well as PhD adviser - generally the principal investigators and, ultimately, any researcher interested in ethical reflection on their own practice.

THE STRUCTURE OF THE VOLUME

Section 1: Integrity and Trust – Core Values in Research Ethics

Section 1 brings to the attention of readers the issue of academic integrity and trust that should happen at the scientific community level.

Chapter 1: From the Ethics of the Research Project to the Ethical Communication of Science – Particularities in the Social and Humanistic Fields

Dr. Antonio Sandu (Ştefan cel Mare University of Suceava, Romania) aims to familiarize readers with the ethical dimensions of the research project from the stage of writing the project proposal through the peer review, obtaining the opinion of a Research Ethics Commission - if the research involves the participation of human subjects - the implementation of the research project, collecting and processing data until the results are communicated and published.

Chapter 2: Research Integrity Dissemination System – “Science RIDS of Misconduct”

Dr. Artem Artyukhov (Sumy State University, Ukraine) and Dr. Tetyana Vasilyeva (Sumy State University, Ukraine review a series of unethical behaviours in research, suggesting a perspective Eastern Europe on the dissemination of ethical practices and the fight against inappropriate conduct. The authors present a case study on the existence and functioning of the Research Integrity Dissemination System at their university of origin.

Chapter 3: Relevance and Importance of Ethics in Post-Grad Research at South African Universities

Dr. Vannie Naidoo (University of KwaZulu-Natal, South Africa) proposes a review of the emergence and stages of the development of research ethics. The perspective addressed by the author aims, through a

case study, for the relevance of research ethics as perceived by post-graduate students in South African Universities for their own research.

Chapter 4: Comparative Analysis of the Codes of Ethics in Top Universities in Romania

Tomiţă Ciulei (Valahia University from Targoviste, Romania) analyses the ethical framework of the research included in the ethics codes of the Romanian universities. The lack of unity in approaching ethical standards between the different universities analysed explains a number of negative consequences that these unethical behaviours can have at university level by diminishing the perceived value of academic integrity and academic autonomy, but also of society in general.

Chapter 5: The Effects of the "Publish or Perish Syndrome" on Research and Innovation in Nigerian Universities – Insights From Recent Research and Case Studies

Dr. Floribert Patrick C. Endong (University of Calabar, Nigeria) makes a critique, from an ethical perspective, upon the practice of conditioning the academic status by the volume of publications and not necessarily by their scientific quality. The unethical elements reviewed are about publishing for purely capitalistic motives, the use of unorthodox methodologies to boost citation index, and fictive authorship of research works among others.

Section 2: Ethics of Research With Human Subjects

The second section brings to the reader's attention a series of specific aspects of the research involving the human participant, the imperative of respect for the autonomy of the participants in the research, and hence the need to obtain information of informed consent from them, the protection of the rights of the participants in the research, risks and benefits of research for the participant and for the society, care for participants belonging to vulnerable populations, etc. Within this section, although starting from bio-medical research, it is intended to extend the ethical principles of research on human beings also for research in the psycho-social and economic field.

Chapter 6: Vulnerability in Research – Defining, Applying, and Teaching the Concept

Dr. Sana Loue (Case Western Reserve University School of Medicine, USA) and Dr. Bebe Loff (Monash University School of Public Health and Preventive Medicine, Australia) conduct an extensive review of literature on the research on people belonging to different minorities, but also on other categories of vulnerable persons.

Chapter 7: Addressing Research Ethics in Clinical Trials in 4 of the Former Communist European Countries – A Shared Responsibility

Dr. George Florian Macarie (University of Medicine and Pharmacy "Carol Davila" Bucharest, Romania) and Ana Voichita Tebeanu (University Politehnica of Bucharest, Romania) analyse the compliance with

clinical research ethics in the countries that are new in terms of implementation or building an adequate structure. The study intends to assess the extent to which the clinical trials performed in four former communist East-European countries considered the ethical norms into their research procedures.

Chapter 8: Risk-Benefit Evaluation in Clinical Research Practice

Dr. Samia Hassan Rizk (Cairo University, Egypt) makes a literature review over some key concepts in the field of ethics regarding research on human subjects, where these terms are reviewed from the perspective of ethical principles and their applicability in order to ensure a favourable risk-benefit balance, according to the ethical principle of beneficence.

Chapter 9: Informed Consent in Research Involving Human Subjects

Dr. Antonio Sandu (University of Suceava, Romania) and Ana Frunză (LUMEN Research Center in Social and Humanistic Sciences) present Informed Consent (IC) in research as a key element in ensuring the ethical character of any research involving human subjects, either bio-medical or psychosocial. IC involves three elements: validity, communication of information and deliberation.

Chapter 10: Personhood, Cultural Ethics, and Biomedical Research – African vs. Euro-American Perspectives

Dr. Ike Valentine Iyioke (University of Michigan-Flint, USA) develops a multicultural perspective of redefining the concept of personhood as it is used in research ethics principles.

Chapter 11: The Ethics of Risk in Psychiatry – The Interplay Between Risk and Probability

Dr. Jean Pierre Clero (Universite de Rouen, France) identifies a series of ethical issues relating to the particularity of the illnesses and also of the patients in the research and therapy of psychiatric patients.

Chapter 12: Ethical Issues in Couple and Family Research and Therapy

Dr. Maria Nicoleta Turliuc (Alexandru Ioan Cuza University, Romania) and Octav Sorin Candel (Alexandru Ioan Cuza University, Romania) show that in couple and family research and therapy, the perspective changes from the individual to the dyad or group. The chapter presents an overview of current research topics in family research and therapy, such as intimate partner violence, illness or multiculturalism, insisting on their ethical implications for the family itself and for society. The chapter proposes a series of possible approaches to ethical dilemmas emerging in the psycho-social research of the family.

Section 3: Ethical Evaluation of Technologies and Responsibility Toward Their Implications for Humankind

Section 3 addresses the issue of the ethical responsibility of research organizations from the perspective of the social, ecological, cultural and even anthropological impact that technologies such as bio-medical

(cloning, genetic engineering, human embryo research) may have, those who aim at developing computing technologies and constructing artificial intelligence, human enhancement technologies etc.

Chapter 13: The Ethics of Embryonic Stem Cells Research – The Human Being in the Early Stages of Development: A "Medicine" or an End in Itself?

Alexandra Huidu (Researcher at LUMEN Research Center in Social and Humanistic Sciences, Iasi, Romania) raises a number of controversies of an ethical nature related to Embryonic stem cell research.

Chapter 14: Tailoring Humans – The Ethics of Genetic Engineering

Alexandra Huidu (Researcher at LUMEN Research Center in Social and Humanistic Sciences, Iasi, Romania) analyses the ethical perspectives of genetic research and human genome decryption. The author asserts that what began as an attempt to eradicate serious illnesses seems to have become, in some cases, under the impetus of human imagination and technological evolution, an exercise by which scientists come to compete with the attributes of divinity: augmenting human beings at a basic level, that affects the identity of the species. Hybrid embryos and chimeric embryos, although still in the experimental stage, can become a reality in relatively short time. The ethical analysis proposed by the author aims at answering questions like What are the limits and who or what sets the standards?

Chapter 15: AIRSE – The Ethics of Artificial Intelligent Robots and Systems

Dr. Bogdan Popoveniuc (Ştefan cel Mare University of Suceava, Romania) formulates a series of ethical reflections involved in the development of Artificial Intelligence technology and the possibility of Technological Singularity, a machine that uses learning algorithms to overcome human intelligence, not only in terms of computing power but also of general intelligence.

Chapter 16: White-Collar Criminals and Organizational Criminology – Theoretical Perspectives

Dr. Seçil Taştan (Marmara University, Turkey) presents a conceptualization of white-collar criminality and enables to understand the psychological, organizational and situational motives behind white-collar crimes. The presented perspective aims to facilitate the creation of an ethical organizational climate that avoids unethical behaviour or even the various forms of fraud.

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