

Željko Kaluđerović

# Contemporary Bioethics

## Themes and Dilemmas





Željko Kaluđerović

**CONTEMPORARY BIOETHICS  
THEMES AND DILEMMAS**



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*To the memory of my mother Vidosava (Vasiljević) Melnik*

Željko Kaluđerović, *Contemporary Bioethics: Themes and Dilemmas*

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## FOREWORD

My emphatic interest in bioethical topics during the last sixteen years of my practical and philosophical engagement has been updated through my participation in a series of meetings, forums, presentations and guest lectures I held in Bosnia and Herzegovina, Bulgaria, Croatia, the Hellenic Republic, Montenegro, North Macedonia, Russian Federation, Serbia and Slovenia.

The book *Contemporary Bioethics* comprises a presentation of seven out of about sixty papers that I have previously published in Serbian, Croatian, Bosnian, Montenegrin, Macedonian, English and Greek in various monographs, journals and proceedings.

It would be difficult to list here all the changes, especially those related to the content and style, which I made in the edited version of the book at hand. The changes were made to minimise occasional digressions and to introduce necessary clarifications caused by my subsequent insights, due to the availability of additional literature and my own translation solutions, both of important bioethical terms and concepts and certain quotations from the source material, as well as for clearer and more fluid presentation.

The contribution to the final version of this book was made by my dear and respected colleagues from the region, with whom, in extraordinary professional and life circumstances of my study stays in Rijeka, Mali Lošinj, Cres, Opatija, Zagreb, Split, Osijek, Tuzla, Zenica, Banja Luka, Sarajevo, Skopje, Bitola, Ohrid, Bijelo Polje, Maribor, Sofia, and Athens, over the past

decade and a half, I had an opportunity to lively discuss, further problematize and heuristically develop an integrative dimension of understanding differentiated aspects of numerous bioethical issues.

Finally, this book is just one of the ways that allows me to express my sincere gratitude to the professors, associates, students and staff of the National and Kapodistrian University of Athens, i.e. the Department of Philosophy of the School of Philosophy, for exceptional collegial collaboration and warm and cordial hospitality which I have experienced in the past few years.

Željko Kaluđerović  
Novi Sad, Spring 2025

## I. Science versus Bioethics: Principles or Values

“Studies flourish, minds are awakening, it is a joy merely to be alive!”<sup>1</sup> said the famous humanist and a friend of Desiderius Erasmus Roterodamus, Ulrich von Hutten, already in the 16<sup>th</sup> century to depict the intellectual excitement of people of the New Age. Almost a century after Hutten, the great English philosopher Francis Bacon moderately, but in line with the optimism of the epoch, notes that the happiness of his time is that little vessels, like the celestial bodies, should sail around the whole globe, and that these times may just use plus ultra where the ancients used non plus ultra. Bacon claims that the true purpose of any science is its practical use. In *The New Organon*, he states that the true and legitimate goal of sciences is nothing else but to endow human life with new discoveries and resources. In other books, Bacon varies the same idea, and as the goal of science he states “to serve human welfare,” “to succeed in helping to eliminate the difficulties of human life,” or “continually enriching humanity with new deeds and forces.”

The practical benefit that he stands for is the dominion of man, i.e. mankind over nature. Unlike some of his contemporaries who wanted to regulate the relations with nature by means of mysticism, magic, or astrology, Bacon was at a position that dominion over nature could only be achieved by the scientific knowledge of nature’s causality:

Human knowledge and human power meet at a point; for where the cause isn’t known the effect can’t be produced.<sup>2</sup>

The dominion over nature, i.e. practical benefit, he considered to be the basic and ultimate, and not the immediate and current goal of science. Intending to dissociate himself from the interpretation of his philosophy in the sense of harsh prac-

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<sup>1</sup> Joseph H. Ward, *The Hand of Providence* (Frankfurt am Main: Outlook Verlag GmbH, 2018), 67.

<sup>2</sup> Francis Bacon, *The New Organon: or True Directions Concerning the Interpretation of Nature*, <http://www.earlymoderntexts.com/assets/pdfs/bacon1620.pdf>, 4.

ticality and pragmatism, Bacon has even argued that “the acts should be made more like pledges of truth than as contributing to the comforts of life,” and that contemplating things as they are, without superstition or imposture, error or confusion, is in itself worthier than all the practical upshots of discoveries.

The German physicist and philosopher Werner Heisenberg in his *Physics and Beyond*, more than three and a half centuries after Bacon, wrote:

Science is made by men, a self-evident fact that is far too often forgotten. If it is recalled here, it is in the hope of reducing the gap between the two cultures, between art and science. ... Science rests on experiments; its results are attained through talks among those who work in it and who consult one another about their interpretation of these experiments. Such talks form the main content of this book. Through them the author hopes to demonstrate that science is rooted in conversations. ... Human, philosophical or political problems will crop up time and again, and the author hopes to show that science is quite inseparable from these more general questions.<sup>3</sup>

Most often we lose sight of this self-explanatory fact, although it represents a crucial point in the approach to the phenomenon of science and scientific creation, and generally in the scientific attitude of man to the world. Warning and insisting on an almost trivial matter probably would not make any sense at all, had it not been generally forgotten, although it is fundamental in the entire scientific development and its overall role and meaning. Tracing Martin Heidegger, it could be said that the oblivion of the

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<sup>3</sup> Werner Heisenberg, *Physics and Beyond*, trans. Arnold J. Pomerans (New York, Evanston, and London: Harper & Row, 1971), XVII.

essential is a precondition and the assumption of any opinion,<sup>4</sup> and probably in that sense, Heisenberg warns of the necessary oblivion of the most understandable fact that science is made by humans. This oblivion is the assumption of the entire scientific and technical<sup>5</sup> progress, that is, of all models of scientific approach to life, i.e. reality. Without it, probably there would be no intense progress as recorded in the last few centuries of the European history. Science, therefore, is an ambivalent and ambiguous phenomenon, which is its characteristic that is both inherent in the European culture and civilization, and at the same time allows it to expand and rise to a planetary and universal level.

Ambivalence is noticeable in almost every scientific act and every scientific result.<sup>6</sup> It could be said when genetics, atomic physics, or some other contemporary discipline is concerned that, to a significant extent, mankind as a community of a single kind of beings depends on them, or furthermore, that the fate of the planet itself, or its survival depends on its results. The achievements of these disciplines facilitate development in both directions almost to the same extent: namely, the results of scientific achievements, although they primarily tend towards progress and achievement of the highest human values, at the same time, they may generate adverse, even catastrophic consequences.<sup>7</sup>

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<sup>4</sup> Martin Heidegger, *Identity and Difference* (New York, Evanston, and London: Harper & Row, 1969), 42-74.

<sup>5</sup> Today, the phrase scientific and technical is often used, although it should not be forgotten that only the modern epoch has enabled and established this commonality of "science" and "technique." In earlier times, this almost implicit blend of science and technique was not self-evident. Although, for example, the invention and use of the steam engine caused the first industrial revolution, it was not the result of scientific discovery, but rather a technical invention created with a very clear practical application in crafts, agriculture and mining. It can be assumed that science will return to its source in the future, i.e. to the search for the truth, while the technique will focus on the correction of the world in terms of creating adequate assumptions and conditions for the improvement of human life.

<sup>6</sup> Albert Einstein used to say that science is a powerful instrument. Whether this instrument is used in the glory of mankind or for its ruin depends on mankind, and not on the instrument. Consult Leopold Infeld, *Albert Ajnštajn* (Beograd: Nolit, 1983).

<sup>7</sup> For an illuminating debate on this, see Julian Savulescu and Evangelos D. Protopapada-

Herbert Marcuse, at one stage, even thought that the scientific and technical process almost completely got out of human control and that the dilemma of whether the planet would survive or fail would be decided by pure coincidence.<sup>8</sup> Closer to the truth, according to the author, is the fact that despite all ambivalence, scientific achievements are still under the control of men and that in different modes this control can be more efficient and more differentiated in the future. That is why the issue of responsibility<sup>9</sup> of the scientist is of crucial importance, it is a fundamental issue of their actions and not an auspicious issue that can but needn't be linked to what is happening in the field of science. In other words, this issue must be the starting point of any scientific act, with full awareness of possible abuses and negative consequences that could follow from almost any result. The lack of full awareness of responsibility can be illustrated by disproportionately high investment in scientific programs and projects that have practical application, and significantly less funds in the so-called pure science, i.e. fundamental research, or in social and humanistic sciences which do not generate immediate benefits but allow the development of science as such.

On the wave of complacency with the technical and technological progress which the 20<sup>th</sup> and the 21<sup>st</sup> centuries have brought, as if it has been forgotten that science and philosophy began with wonder or admiration (θαυμάζειν).<sup>10</sup> At first,

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kis, "‘Ethical Minefields’ and the Voice of Common Sense: A Discussion with Julian Savulescu," *Conatus – Journal of Philosophy* 4, no. 1 (2019): 125-133.

<sup>8</sup> Herbert Marcuse, *One-Dimensional Man* (London: Taylor and Francis, 2002).

<sup>9</sup> About the concept of responsibility see next chapter "II. Hereditary Genetic Modifications: Gene Therapy or Eugenics." Consult also Iva Rinčić Lerga, *Bioetika i odgovornost u genetici* (Zagreb: Pergamena, 2007).

<sup>10</sup> Consult in particular *Metaphysics* 982b11-21. About wonder as something that initiates philosophizing, Aristotle writes in *On the Heavens* 294a11-28, as well as in other places. See Hermann Bonitz, *Index aristotelicus*, Vol. 5 (Berlin: Walter de Gruyter, 1975), 323a45-59. Plato also writes about the same topic, e.g., in *Theaetetus* 155d and *Philebus* 14c-e. For Plato, the wonder is, primarily, oriented to ideas (*Parmenides* 129c), while for Aristotle this is the case with the sensuous world, as can be seen from his note at *Parts of Animals* 645a5-

the wonder was related to the unusual phenomena that stood before people's eyes, and then transferred to larger things, such as celestial bodies, and reached the wonder about the creation of the whole universe. Wonder, of course, also contains in itself a dimension of ignorance, which, again, is most often related to the ignorance of the cause. People have always been amazed when they see a consequence and cannot find the cause of its occurrence. The awareness of this ignorance often occurs when a person concludes that something is happening in a way that is opposite to the usual one. An example that Aristotle presents is the marionettes which no one expects to move or dance according to an appropriate tune (*Met.* 983a12-15). Then it becomes clear that there is some hidden cause. Man's natural aspiration for knowledge, assisted by some sort of fear of ignorance, as well as by the necessary amount of boldness, urges people to look for the causes of these phenomena.

Similar processes occur when solving geometric, astronomical or microbiological problems, for instance. Undoubtedly, the dramatic changes in the world over recent decades have been the result of scientific developments, but it should be borne in mind that this is not the primary goal of science. The significant motive for people to start dealing with science was, and it undoubtedly should also be today, the search for the truth. In Aristotle's words: knowledge for the sake of knowledge.<sup>11</sup>

In this connection of motives that are related to the truth and search for it, as its practical pretensions, the essential dual value of science and scientific development can be detected. The modern world is undoubtedly marked by the prevalence of the latter, practical aspect of science, or the efficiency of ap-

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17, where at the end of the passage (*PA645a16-17*) he states: "Every realm of nature is marvellous (*ἐν πᾶσι γὰρ τοῖς φυσικοῖς ἔνεστί τι θαυμαστόν*)."

Consult Aristotle, *Parts of Animals*, in *The Complete Works of Aristotle I*, ed. Jonathan Barnes, trans. William Ogle (Princeton, NJ: Princeton University Press, 1991), 645a16-17.

<sup>11</sup> See Željko Kaluđerović, *Istorija belenske filozofije II* (Novi Sad: Akademska knjiga, 2024), 37-44, 147-152.

plying its results in the everyday life of people, so the attention of science and scientists is most often focused on achieving as good a result as quickly as possible.

Another German physicist and philosopher, Carl Friedrich von Weizsäcker, is right in saying that as long as concern and consideration are not equally applied both to the results and negative consequences of a scientific experiment, the human race will not be mature enough to live in a technical civilization.<sup>12</sup> The utilitarian moment, of course, has not been an eternal feature of science and scientific development. It has acquired that aspect through certain historical circumstances and conditions that characterize the spirit of the time, especially in the last hundred years. The search for truth, wonder and curiosity,<sup>13</sup> as indicated, represents a permanent feature of scientific activity, something without which science simply cannot exist. The practical side, on the other hand, is on the margins of science, while the questions about the essence of man and the human world are its permanent preoccupation. These specific human questions play a major role in any scientific process, research, and experiment. Their presence certainly influences the results of contemporary sciences.<sup>14</sup>

<sup>12</sup> Carl Friedrich von Weizsäcker, *Die Verantwortung der Wissenschaft im Atomzeitalter* (Göttingen: Vandenhoeck & Ruprecht, 1986).

<sup>13</sup> Consult also concluding considerations of Immanuel Kant's *Critique of Practical Reason*: "Two things fill the mind with ever new and increasing admiration and awe, the oftener and the more steadily we reflect on them: the starry heavens above and the moral law within. ... The former view of a countless multitude of worlds annihilates as it were my importance as an animal creature, which after it has been for a short time provided with vital power, one knows not how, must again give back the matter of which it was formed to the planet it inhabits (a mere speck in the universe). The second, on the contrary, infinitely elevates my worth as an intelligence by my personality, in which the moral law reveals to me a life independent of animality and even of the whole sensible world, at least so far as may be inferred from the destination assigned to my existence by this law, a destination not restricted to conditions and limits of this life, but reaching into the infinite." Immanuel Kant, *Critique of Practical Reason*, trans. Thomas Kingsmill Abbott, [http://www.gutenberg.org/files/5683/5683-h/5683-h.htm#link2H\\_CONC](http://www.gutenberg.org/files/5683/5683-h/5683-h.htm#link2H_CONC).

<sup>14</sup> Including the mentioned genetics. Starting from the first research by Gregor Mendel in 1865, through the explanation of DNA molecule structure by James Watson and Francis Crick in 1953, cloning of sheep Dolly in 1997, until the project of sequencing



In that sense, Edmund Husserl wrote the following in *The Crisis of European Sciences and Transcendental Phenomenology*:

The specifically human questions were not always banned from the realm of science; their intrinsic relationship to all the sciences – even to those of which man is not the subject matter, such as the natural sciences – was not left unconsidered. As long as this had not yet happened, science could claim significance – indeed, as we know, the major role – in the completely new shaping of European humanity which began with the Renaissance. Why science lost this leadership, why there occurred an essential change, a positivistic restriction of the idea of science – to understand this, according to its deeper motives, is of great importance for the purpose of these lectures.<sup>15</sup>

It could be said that the original idea of science in its form of wonder and curiosity is more beneficial for man than all practical discoveries that undoubtedly radically change the world and often establish an unexpected reality for man himself. The trouble is that the newly established reality can never satisfy human nature, that the scientific and technical universe has expelled precisely that which this nature is searching for and what it feels like its original domestication. On the other hand, all technical and technological achievements with practical application are the result of purely theoretical, purely scientific research, and not of some sort of rational plan of the scientists themselves.

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of the human genome that was launched at the end of 1990 and the drawing up of the human genome map in 2003. See the chapters “II. Hereditary Genetic Modifications: Gene Therapy or Eugenics” and “III. Human Cloning: Professional-Philosophical or Cultural-Civilizational *Aporia*.”

<sup>15</sup> Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, trans. David Carr (Evanston, IL: Northwestern University Press, 1970), 7.

The basis is the effort to discover the marvellous order in nature, and practical pretensions would only disable these great scientific ambitions.<sup>16</sup>

The modern civil era is based on the logocentric and homocentric image of the world,<sup>17</sup> whose meaning, in Aristotle's trail, is derived from high trust in human understanding and reasoning abilities. The Stagirites, moreover, emphasizes that the abilities of logos can only be attributed to humans.<sup>18</sup> By affirming that only man has a gift of speech among all living creatures (λόγον δὲ μόνον ἄνθρωπος ἔχει τῶν ζώων, *Pol.* 1253a9-10), he emphasizes the difference between humans and other living beings also in the segment of the organized community for life.

By defining man as the only living being who has a speech,<sup>19</sup> Aristotle at the beginning of *Politics*, exhibited one of his three known original definitions of man. The second definition of

<sup>16</sup> British physicist Ernest Rutherford, who defined the nuclear nature of atoms in 1932, said that physicists were not seeking for new energy sources or new and usable elements. The real reason for what they did lies in the impulse and fascination of research and the discovering of the deepest secrets of nature.

<sup>17</sup> Logocentrism represents the view that the principle of understanding and reason is the basis of man's world but also of the universe as a whole. Homocentrism, on the other hand, as a modern worldview is based on Aristotle's vision of man as a separate being among other natural beings. Such an understanding comes from the belief that the ultimate basis of our world is not determined by nature, god, accident or coincidence, but that man, as a free individual, with his powers is the basis of the human historic world.

<sup>18</sup> The dignity of an individual is viewed from the perspective of the reasonability of one's nature, and such nature is attributed only to man. Only man is liberated from the empire of the goals, while the so-called non-human living entities are related to connections and relations that exist in nature. Only man is aware of himself and can distance himself from himself for the benefit of higher goals, to relativize his own interests, up to self-surrendering. Consult Jacques Derrida, "The Animal That Therefore I Am (More to Follow)," *Critical Inquiry* 28, no. 2 (2002): 369-418. It gives man, as a moral being, the absolute status that establishes his indescribable dignity, which gives him the right not to be "enslaved" by anybody and being a moral being, not to be deprived of his own goals. See Igor Eterović, *Kant i bioetika* (Zagreb: Pergamena, 2017), 104-110.

<sup>19</sup> Denial of λόγος abilities of animals is not an incidental thing in various Aristotle's writings, but a fact of crucial importance in his observations. It was conducted in the Stagirites' *corpus* in two ways. Directly, by denying animals the ability to have any of these abilities, and indirectly by emphasizing that logical abilities can be attributed exclusively to humans. Consult Željko Kaluđerović and Ana Miljević, "Stagirinanin, Erešanin i ne-ljudska živa bića," *ARHE* XVI, no. 31 (2019): 105-131.

man is that he is the only living being able to differentiate between good and evil (ἀγαθοῦ καὶ κακοῦ), i.e. just and unjust (δικαίου καὶ ἀδίκου) (*Pol.* 1253a15-18). The third, and certainly best known, Stagirites' definition of man is that he is by nature a social animal or a political animal (ἄνθρωπος φύσει πολιτικὸν ζῷον, *Pol.* 1253a2-3). Man is "by nature," i.e., by his original structure, which distinguishes him from other natural species, a being that can realize its humanity only in a community with other people. This communality of people is not identical to the communality of ants, bees or some other animals that also live in organized forms of living. According to Aristotle, people base their communality on logos in the community as a community, by regulating it by agreed and accepted rules, customs, and laws.

The anthropocentricity<sup>20</sup> of this and such Weltanschauung is an important reason why our dominant technical civilization did not develop in harmony with nature, but much more often in opposition to it. No human act in the past was able to substantially affect the spontaneity of the existence of our planet. As much as man was changing the natural environment in which he lived, this did not leave a greater trace on Earth itself. The rapid development of technique in this as well as in the last century put man in a completely new moral situation. The new situation is reflected in the fact that modern man must assume responsibility for the effects that are not the result of the actions of any individual, but represent the collective act, an act, in Husserl's terms, "of anonymous functioning subjectivity."<sup>21</sup>

The effects of modern technique suggest a completely new situation for traditional social and humanistic sciences since the

<sup>20</sup> About the roots of anthropocentrism see my article: Željko Kaluđerović and Dejan Donev, "Pretsokratovskoto razbiranje na čovekot," in *Zbornik Testimonia philosophica vo čest na prof. d-r Vera Georgieva po povod 70 godini od raganjeto*, ed. Jasmina Popovska, 47-60 (Univerzitet Sv. Kiril i Metodij: Skopje, 2020). Consult as well Tomislav Krznar, *U blizini straha* (Karlovac: Veleučilište u Karlovcu, 2016), 63-76.

<sup>21</sup> Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, trans. David Carr (Evanston, IL: Northwestern University Press, 1970), 111-114.

postulate of an anthropocentric image of the world is essentially derogated in the sense that people as a species are unquestionable in their existence on the Earth.<sup>22</sup> Ensuring the survival of the human species in the foreseeable future is a task to whose achievement new knowledge in some of them should contribute, especially in ethics<sup>23</sup> or bioethics.<sup>24</sup> In order for this fact to be confirmed, they need to re-examine the power of technique, whose deeds thus acquire a philosophical sign, given the importance they have in the lives of the human species.

In the meantime, nature has begun to vigorously “protest” against excessive human activity by changing the climate on Earth (“global warming”), but also by increasing the number of diseases and plagues in humans and animals.<sup>25</sup> Burning stakes during the crisis<sup>26</sup> of the so-called ‘Mad Cow,’ ‘Bird Flu,’ and ‘Swine Flu’ diseases, the ‘African swine’ fever, or the latest

<sup>22</sup> On this, however, there is no unanimous agreement; see Evangelos D. Protopapadakis, “Environmental Ethics and Linkola’s Ecofascism: An Ethics beyond Humanism,” *Frontiers of Philosophy in China* 9, no. 4 (2014): 586-601; also, on the same issue, Evangelos D. Protopapadakis, “Supernatural Will and Organic Unity in Process: From Spinoza’s Naturalistic Pantheism to Arne Naess’ New Age Ecosophy T and Environmental Ethics,” in *Studies on Supernaturalism*, ed. G. Arabatzis, 173-195 (Berlin: Logos Verlag, 2009).

<sup>23</sup> About ethics as a philosophical discipline on morality see Željko Kaluđerović, “Pretpostavke nastanka morala,” *Bošnjačka pismobrana – Zbornik radova Simpozija “Gdje je nestao – moral”* 15, nos. 42-43 (2016): 135-147.

<sup>24</sup> Fritz Jahr coined the original term Bioethics and formulated a Bioethics Imperative: “Respect every living being on principle as an end in itself and treat it, if possible, as such!” Fritz Jahr, “Reviewing the Ethical Relations of Humans towards Animals and Plants,” in *Fritz Jahr and the Foundations of Global Bioethics: The Future of Integrative Bioethics*, eds. Amir Muzur and Hans-Martin Sass (Berlin, Münster, Wien, Zürich, London: Lit Verlag, 2012), 4. Consult also Ivana Zagorac, *Bioetički senzibilitet* (Zagreb: Pergamena, 2018), 155-167.

<sup>25</sup> Some of the leading authors, whose views are representative of contemporary discussions about the new regulation of the relationship between humans and animals are undoubtedly Peter Singer, Tom Regan, and Klaus Michael Meyer-Abich. For more details see the chapter “IV. Non-human Living Beings: Moving Objects or Moral Subjects.”

<sup>26</sup> The term ‘crisis’ originates from the Greek noun κρίσις and has at least four groups of meanings: ‘separating,’ ‘distinguishing,’ ‘decision,’ ‘judgement,’ ‘choice,’ ‘election,’ ‘judgement of a court,’ ‘trial,’ ‘suit,’ ‘condemnation,’ ‘dispute,’ ‘event,’ ‘issue,’ ‘turning point of a disease,’ ‘middle of a spinal column.’ Consult Henry G. Liddell, Robert Scott, and Henry S. Jones, *A Greek-English Lexicon* (Oxford: Oxford University Press, 1996), 997.

Coronavirus (COVID-19),<sup>27</sup> to name some, are just a warning to people and a hint of much more serious problems they may face. As an imperative, a new order in life is introduced, where one will become aware that the Earth can no longer tolerate man's often ruthless acts but requires the cooperation of man with the world surrounding him.

The usual behaviour of a typical scientist, especially in natural and technical sciences, until relatively recently was characterized by simplified utilitarian reasoning and scientific reductionism, thinking and decision-making on science in its narrowest part, excluding or faintly mentioning the cooperation between different areas and the compatibility of their methods. Fortunately, there are more and more scientists who have changed the original attitude and it can also be said due to the holistic approach of certain social and humanistic sciences, and they begin to look at problems more comprehensively, taking into account knowledge from multiple disciplines when making conclusions on the use or non-use of certain methodology and technique. The smallest common denominator of all people should, or in fact, would have to be the attitude of Hans Jonas in his work *The Imperative of Responsibility*: We should not compromise the conditions for an indefinite continuation of humanity on earth.<sup>28</sup>

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<sup>27</sup> See Dejan Donev and Denko Skalovski, "Responsibility in the Time of Crisis," *Conatus – Journal of Philosophy* 8, no. 1 (2023): 87-109; also, on one of the most flaming issues in global bioethics, that of triage, see Ndukaku Okorie, "The Possibilities, Limits, and Complexities of Triage in COVID-19 Regime," *Conatus – Journal of Philosophy* 8, no. 1 (2023): 233-249. See also Martin Woesler and Hans-Martin Sass, eds., *Medicine and Ethics in Times of Corona* (Münster: LIT Verlag, 2020).

<sup>28</sup> Hans Jonas, *Princip odgovornosti* (Sarajevo: Veselin Masleša, 1990), 28.



## II. Hereditary Genetic Modifications: Gene Therapy or Eugenics

Significant breakthroughs in genetic<sup>29</sup> research promoted by the mentioned human genome project, advances in molecular biology, new reproductive technologies, have improved the understanding and the possibility of genetic interventions as a potential medication for diseases caused by differentiated disorders,<sup>30</sup> especially those caused by abnormalities in individual genes. Limitations of current medical therapies in the treatment of diseases with genetic components lead to the efforts to develop techniques for treating diseases at the molecular level by modifying the cell itself. So far, most research and clinical gene therapy<sup>31</sup> tools have been invested in developing techniques for

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<sup>29</sup> Genetics, generally speaking, is defined as: “Scientific area of biology on the *heredity and variations in living organisms*.” See Ninoslav Đelić and Zoran Stanimirović, *Principi genetike*, trans. Željko Kaluđerović (Beograd: Elit Medica, 2004), 1.

<sup>30</sup> According to some estimates, currently several thousand different genetic diseases are known (estimates range from 5.000 to 7.000). For a very small percentage of them, there is adequate testing.

<sup>31</sup> In a broader sense, gene therapy implies any exogenous effect on the activity of certain genes, for example, the effect of thyroid hormones used in the treatment of hypothyroidism or steroidal hormones in the treatment of asthma. In the narrow sense, gene therapy implies the treatment of the disease by introducing genetic material into the target tissue of the patient. This definition includes numerous genetic manipulations such as the insertion of a cloned gene or gene portions, genes from other genomes, artificial genes such as antisense genes, oligonucleotides, and others. The most common genetic modification is directed at the disease-affected cell, but the targets of gene therapy can be healthy cells as well, for example, cells of the immune system, which would represent a form of vaccination. Regarding the purposefulness and rationality of the application of gene therapy in cases where conventional therapies are also available, it is considered that the relevant criteria for the selection of diseases for gene therapy are as follows: 1.) that there is no other effective treatment, 2.) that one organ is affected (primarily), 3.) that there is an animal model and the success of therapy in human cells *in vitro*, 4.) a safe procedure, and 5.) monogenic disease with the identified genome (in regards to hereditary disorders). There are several ways to implement gene therapy. *Ex vivo* therapy implies that the target cells of the patient are isolated, genetically modified, and then returned to the patient. In *In-situ* therapy, the therapeutic gene is inserted into the localized and accessible part of the body (for example, in melanoma of the skin) along with the vector. *In vivo* therapy means that the therapeutic gene is inserted directly into the body (in the circulation, in the liver, muscles, lungs ...). Data are from Ivana Novaković, “Tehnologija rekombinovane DNK i genetičko inženjerstvo. Testovi hibridizacije, molekularna citogenetika, PCR,” <http://www.mfub.bg.ac.rs/dotAsset/37433.pdf>, 11-13.



interventions on non-reproductive body cells. Only recently the researchers have started to announce credible successes in improving the health of patients through gene therapy, suggesting breakthroughs in this field.

Progress in research in the modern age gives rise to the possibility that man has the technical capacity to modify the genes that will be transferred to the next generation.<sup>32</sup> This is about the so-called hereditary genetic modifications or any biomedical interventions from which it could be expected to transform the genome<sup>33</sup> that a person can transfer to their offspring. One form of hereditary genetic modification is the treatment of embryos or reproductive cells that develop in an egg or sperm of the developing organism, and the transmission of its hereditary properties. The second form of the so-called germinal therapy is the modification of gametes (sperm or ovum cells) or the cells from which they originate. Other evolving technologies, such as the insertion of artificial chromosomes, can also induce genetic changes that can be inherited.

What are the possible explanations for the development and application of such technologies? In theory, the modification of genes that are transferable to future generations can have several advantages over gene therapy of somatic cells. The hereditary genetic modifications offer the possibility of preventing the inheritance of certain genetically based illnesses within a family, instead of repeating the somatic therapy from generation to generation. Some scientists and bioethicists believe that germinal interventions are necessary from a medical point of view to prevent certain types of disorders, because there are situations in which screening and selection are not applicable,

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<sup>32</sup> For a detailed account of hereditary modifications see Zeljko Kaludjerovic, "Bioethics and Hereditary Genetic Modifications," *Conatus – Journal of Philosophy* 3, no. 1 (2018): 31-44.

<sup>33</sup> The genome is a set of hereditary factors or genes that are found only in one set of chromosomes. Consult Dragoslav Marinković, Nikola Tucić, and Vladimir Kekić, *Genetika* (Beograd: Naučna knjiga, 1985), 21.



as in the case of parents with the same mutation.<sup>34</sup> Because germinal intervention can act at the earliest stage of human development, it also offers the potential to prevent irreversible damage that can be associated with defective genes before they occur. Over a long period, germinal gene modifications can be used to reduce the occurrence of certain hereditary diseases in the human gene pool that cause great suffering and problems.

Attempts to modify the genes that will be transmitted to future generations cause profound bioethical, theological, legal and political dilemmas because of the possible change in the fundamental characteristics of our descendants.<sup>35</sup> These techniques can give mankind extraordinary control over the biological properties and personality characteristics that are today considered essentially human. Scientists and (bio)ethicists pay attention to hereditary genetic interventions in humans, especially in the last four and a half decades. Already in 1972, several scientists warned that future gene therapy of somatic cells would imply the risk of unintentional change of germ cells as well as of target somatic cells. With the current gene addition technology, iatrogenic genetic damages can occur because of unintended germinative side effects of somatic cell therapy. These problems are at least as great as the consequences of genetic damage that might arise from the intended germinal transfers. Therefore, attention must also be paid to the accompanying side effects of somatic cell therapy, as to those that are currently being planned.<sup>36</sup>

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<sup>34</sup> See Burke K. Zimmerman, "Human Germ Line Therapy: The Case for Its Development and Use," *The Journal of Medicine and Philosophy* 16, no. 6 (1991): 597.

<sup>35</sup> On the promises and the perils of genetic engineering see Evangelos D. Protopapadakis, *From Dawn till Dusk: Bioethical Insights into the Beginning and the End of Life* (Berlin: Logos Verlag, 2019), 75ff.

<sup>36</sup> In addition to significant technical constraints, gene therapy implies the problems related to adverse effects that can occur due to the handling of hereditary material. Possibly, the viral vector may cause severe and even lethal infections in the patient, as was the case with a young man who received gene therapy due to ornithine transcarbamylase deficiency (1999). Also, the insertion of foreign DNA can trigger carcinogenesis processes, which is in

What are the intrinsic considerations, i.e. the bioethical aspects that must be considered before possibly starting with hereditary genetic modifications? First, it is necessary to ask oneself if there are fundamental reasons for such interventions, i.e. whether they are in principle morally permissible. Secondly, we need to examine the social dimension and the moral action or the impact that these technologies can have on human society.

Some analysts claim that human genes have specific significance and value because, biologically speaking, they are essential for the existence of mankind. Others argue that genes make it possible to distinguish people from one another as individuals and that they are the core of humanity. Based on these views, conclusions are drawn that genes deserve a special status that pre-excludes germinal intervention to modify them.<sup>37</sup> But even if it is recognized that human genes have extraordinary significance and value, this does not have to be an argument for a priori rejection of all studies on hereditary genetic modifications. The genes, as well as other parts of the human body, have a derived value and significance, and only through human thinking discourses, they gain their specific status, which should not be inviolable and untouchable in an almost religious sense. By contrast, precisely because genes have such a great significance for action in human beings, it is also bioethically important that they perform their function most appropriately. Moreover, it can be argued that if there is a technical possibility in this direction, without serious damage to human well-being and the values that dominate human society, people are almost obliged to repair genes both in current and future generations.<sup>38</sup>

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practice recorded by malignant disease in several cases. It is generally believed that the best prospects for the application of gene therapy are in malignant diseases, and the majority of the most tested gene therapy protocols in humans so far are related to the treatment of malignant diseases (about 69%), followed by the treatment of monogenic diseases such as cystic fibrosis, Duchenne muscle dystrophy, ADA deficiency, haemophilia (17%) and the treatment of infectious diseases, primarily AIDS (12%). See Novaković, 14.

<sup>37</sup> Consult Audrey R. Chapman, *Unprecedented Choices: Religious Ethics at the Frontiers of Genetic Science* (Minneapolis, MN: Fortress Press, 1999), 153-156.

<sup>38</sup> The argument that genetic modification of an organism is impermissible from the

It is also noted that future generations have the right to inherit an unmodified human gene base because the gene pool represents their “genetic heritage,” resources or wealth to which all people are equally entitled as to the “common heritage” of the human species. An additional assertion, e.g. in the resolution of the Parliamentary Assembly of the Council of Europe, is that individuals have the right to genetic heritage that has not been artificially modified, except in circumstances that are recognized as compatible with full respect for human rights.<sup>39</sup> Though they sound quite acceptable, these views can be challenged as well. Strictly speaking, while individual humans have germinative cells and their genus, the human species has no “germinative line” in the genealogical sense of the word. The human gene pool is also a kind of heuristic abstraction, not a natural thing because the reference material in nature is missing. Individuals simply inherit a specific set of genes derived from their parents. Therefore, from the biomedical perspective, there is no intergenerational “human germination line” that can serve as a backbone and an important factor for the future of humans.

Since it is important to ensure that future generations have open access to the benefits of genetic research, it is conceptu-

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bioethical point of view since it is in opposition to the natural flow of things, i.e. because it is unnatural, should be additionally problematized. Namely, to (self)understanding of the essence of man belongs the feeling or image of a kind of the sundering of the direct i.e. natural existence of man, which makes man in its own perspective a unique event in the world, because his existence is represented to him as un-natural, artificial, modifiable, as second-nature or the highest point of the continuity of nature. In other words, the spiritual existence of man may be understood as the highest step of his natural existence (or nature in general), or as a walk away from natural existence. Hence, to say that something is unnatural does not mean nor imply that it immanently bears a negative axiological sign. See Bjørn K. Myskja, “The Moral Difference Between Intragenic and Transgenic Modification of Plants,” *Journal of Agricultural and Environmental Ethics* 19, no. 3 (2006): 225-238.

<sup>39</sup> Consult “Recommendation 934 on Genetic Engineering,” adopted on 26 Jan. 1982, in *Texts Adopted by the Assembly*, 33<sup>rd</sup> Ordinary Session, Third part, January 25-29, 1982 (Strasbourg: The Council of Europe, 1982). Consult also the chapter “IV. Non-Human Living Beings: Moving Objects or Moral Subjects.”

ally wrong to interpret the human gene pool as a “gift” accumulated by wise investment during natural selection, and which can be controlled and managed by people today. The evolution process that controls the allelic<sup>40</sup> content of the human gene pool is not something that can be managed or controlled. The human gene pool is not fixed and constant but in a constant flow throughout human history.

Other analysts believe that, in principle, it should not be allowed to change the genetic appearance of future individuals through germinative interventions, because their approval cannot be obtained, that is, their consent cannot be granted.<sup>41</sup> Of course, this is the so-called intergenerational ethics,<sup>42</sup> where it is not easy to determine the nature and the basis of the obligations that the present generations have towards the future generations. The responsibility of preserving the interests of future generations as such is undoubtedly the responsibility of present men, but the question is whether this obligation should completely stop researching hereditary genetic modifications. The obligation to consider the offspring can also be expressed as an obligation to provide a better life for the offspring, which may include the elimination of harmful genes and the subsequent improvement of the health perspective of future generations.

A special aspect of the impact of hereditary genetic modifications on the community which to be emphasized is the segment concerning the equality and justice of people. Well-off citizens could, besides providing their children with the best economic, social and many other prerequisites, provide them with the

<sup>40</sup> Different forms of the existence of one gene are called alleles of that gene. See Vuksava Diklić, Marija Kosanović, Jovanka Nikoliš, and Smiljka Dukić, *Biologija sa humanom genetikom* (Beograd: Grafopan, 2001), 231.

<sup>41</sup> Consult Marc Lappé, “Ethical Issues in Manipulating the Human Germ Line,” *The Journal of Medicine and Philosophy* 16, no. 6 (1991): 621-639.

<sup>42</sup> On the rights of future people *vis-à-vis* presently living people see more in *The Stanford Encyclopedia of Philosophy*, <https://plato.stanford.edu/entries/justice-intergenerational/>.

best possible ‘nature’ as well. The material advantage of a small number of people would thus be capitalized in the genetically better offspring, which would further deepen the gap between people and create a dangerous dimension of ‘natural’ inequality among people.<sup>43</sup> This only indicates how much care should be taken during the potential development of hereditary genetic modifications and even more with their possible use. A commutative form of justice in health in many, even in some highly developed countries has not been implemented in practice or is still at a declarative level,<sup>44</sup> which could, hypothetically, lead to more frequent use of new technology by highly educated and well-off people. This, accompanied by the so-called racial point, namely possibly the more widely spread use of hereditary genetic modifications by one race, could make a hiatus among humans in genetic matters as well, and lead to potentially very dangerous social and political consequences in some countries, as well as at the international level. The hereditary genetic modifications can also increase prejudice towards people with special needs, which additionally points to care, caution and careful control, because prejudices<sup>45</sup> are already difficult and slow to change.

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<sup>43</sup> This gap is inspired by various quasi-scientific theses about the intrinsic superiority of the rich and the inferiority of the poor. Intelligence test (IQ test) e.g. was originally established as a way of discrimination between ‘capable’ and ‘incompetent’ people. The assumption was that intelligence is an innate genetic quality, so the early version of this test accordingly overlooked the impact of education. As a consequence, an inaccurate conclusion was drawn that poorer people have a lower intelligence coefficient than the rich. A well-known representative of this thesis and the founder of the first department for human genetics in the world was Francis Galton. See Francis Galton, *Hereditary Genius* (Honolulu, HI: University Press of the Pacific, 2001).

<sup>44</sup> Official formulations are completely acceptable. According to Article 20 of the *Health Care Law of the Republic of Serbia*: “The principle of equity of health care shall be realized by the ban on discrimination while providing health care on the grounds of race, sex, age, national affiliation, social origin, religious beliefs, political or other affiliations, income scale, culture, language, kind of disease, mental or bodily disability.” See *Zakon o zdravstvenoj zaštiti*, trans. Željko Kaluđerović, [https://www.paragraf.rs/propisi/zakon\\_o\\_zdravstvenoj\\_zastiti.html](https://www.paragraf.rs/propisi/zakon_o_zdravstvenoj_zastiti.html).

<sup>45</sup> The term ‘prejudice’ should be here understood in line with its etymology: “pre-judgement,” therefore something that precedes the judgement. Even today, when scientists and philosophers make significant efforts to clarify certain things, they do so in environ-

The problem that may arise concerning germinative manipulation in humans can result in the acceleration of tendencies for the commercialization of children's gender as well, even children, and their assessment according to appropriate quality standards, no matter how harsh and unacceptably this phrase sounds. Given the increasing tendency for patients to be treated as consumers of certain services and the ever-present idea of the economic justification of certain treatments, this danger is increasingly present.

Bioethicists also express concern that the advancement of technology may lead to the imposition of a harmful or distorted perception of normality and alongside that what constitutes an improvement in human characteristics.<sup>46</sup> Therefore, for some, it is dangerous to define a normal human genome uniformly, since thus all deviations from the normal sequence will be considered abnormal and undesirable. Problems also exist due to different cultural and social paradigms in some coun-

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ments where many prejudices are already present. However, the nature of the scientific opinion is that it is not led by existing prejudices, but explores them, critically reviews and replaces them with explanatory clarifications and an adequate understanding. Many US federal states passed laws that stipulated imprisonment and/or sterilization for the so-called inferior categories of the population. By 'inferior categories of the population' they meant mentally ill, people with low intelligence coefficient and criminals. How much prejudices have gained momentum is illustrated by the fact that in some countries the notion of inferiority was understood even more broadly, so it included both homosexuals and communists. Overall, during the 1930s, approximately 20,000 people were sterilized in the United States. The negative eugenics culminated in extensive sterilization procedures carried out in Nazi Germany. Through such acts, from 1934 to 1945, some 400,000 "genetically vulnerable" people were forcibly sterilized, according to an appropriate law on the protection of descendants from hereditary diseases. Of course, this number does not include thousands of Jews, Roma and other victims who were unlawfully sterilized in concentration camps during the war. Finally, about 200,000 people on European soil were "eliminated" as a result of Operation T4 (euthanasia) and its consequences between 1939 and the end of the Second World War. Consult <https://www.britannica.com/event/T4-Program>.

<sup>46</sup> There are theses that, in the absence of an objective and unique definition of a 'normal' state, the meaning of what is considered normal will be highly variable and fluid, which would not be a surprise given the sceptical and relativistic spirit of the epoch. The result of such processes may be that what now seems to be radical and unacceptable could become quite acceptable shortly.



tries, for which subsequently there could be attempts to impose them on other countries and nations.

The author is at the standing point that the use of hereditary genetic modifications for preventive purposes and the treatment of clearly indicated diseases in future generations does not necessarily lead directly to eugenics, but that strong measures are needed to ensure that the entire activity at some point does not turn into a tendency towards improvement of human traits.<sup>47</sup> If hereditary genetic modifications are used at all, they should be used exclusively for therapeutic purposes, and only when other treatment options do not give specific adequate results.<sup>48</sup> Of course, there will always be a risk that the development of applications to correct the defective alleles will be, due to the same nature or similarity of the technology, transformed into a seemingly hard-to-notice improvement of someone's characteristics. For example, the ability to correct genes that are responsible for the development of Alzheimer's disease can at the same time mean the ability to improve someone's memory.<sup>49</sup>

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<sup>47</sup> It is recommendable to favor basic studies at the cellular and animal levels that concern the consequence of germinative modifications. This is consistent with a long tradition of scientific freedom and reflects the understanding that the prevention of such research can deprive humanity of unexpected discoveries that can inform or make progress in other areas of medical research, as well as in the research concerning hereditary genetic modifications.

<sup>48</sup> There is an interesting information that appeared in the media at the end of 2017. Namely, for the first time, scientists have tried to alter a gene in the human body in order to permanently alter this person's DNA and thus cure the disease. Brian Madeux (44), who is suffering from a metabolic disorder called Hunter's syndrome, intravenously received billions of copies of the corrective gene and a genetic tool that needs to cut his DNA in a precisely defined place. See <https://www.apnews.com/4ae98919b52e-43d8a8960e0e260feb0a>.

<sup>49</sup> Hereditary genetic modifications, however, do not represent neither close nor real medical or scientific problem for most African, and not only African, developing states, since they have to deal with more important health issues. A confirmation of this thesis can also be obtained by a brief insight into the official statistics of the various international organizations. According to some of them, the leading causes of child mortality in developing countries are the following diseases: pneumonia, diarrhoea and malaria, along with pre-term birth, birth asphyxia and trauma, and congenital anomalies (many of them can be relatively easily prevented by the elementary improvement of basic health care). UNICEF reports that 1 out of 6 childhood deaths were due to pneumonia (or 920,000

It is not to be expected, however, that scientists will abandon their projects because of the potential dangers of future inventions, nor are things so black that Peter Sloterdijk should be followed in the conclusion that anything that anyone does today in the space that is under the influence of technical advancement, has been put into the function of general military strategies, including, according to him, the technological progress itself.<sup>50</sup>

The process of spreading scientific and technical achievements is an anthropological phenomenon that is difficult to stop because it is considered to be the ontological determinant of modern man. Society truly has a complex task to balance between the scientific freedom of research and the responsibility of preserving social norms and social values.<sup>51</sup>

Scientific freedom ... is an acquired right, generally approved by society as necessary for the advancement of knowledge from which society may benefit. But scientific freedom and responsibility are basically inseparable.<sup>52</sup>

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childhood deaths per year). According to WHO, approximately 525,000 children under the age of five die from diarrheal diseases each year. As stated in the 2019 World Malaria Report, children under five accounted for 67 per cent of all malaria deaths worldwide in 2018 (about 272,000 deaths). Finally, around 5.2 million children under five years of age die annually from various diseases that can be cured. Consult <https://www.who.int/news-room/fact-sheets/detail/malaria>; [https://www.who.int/news-room/fact-sheets/detail/children-reducing-mortality#:~:text=Top%2010%20countries%20with%20the,children%20under%2D5%20years%2C%202019&text=Globally%2C%20infectious%20diseases%2C%20including%20pneumonia,death%20for%20children%20under%20five](https://www.who.int/news-room/fact-sheets/detail/children-reducing-mortality#:~:text=Top%2010%20countries%20with%20the,children%20under%2D5%20years%2C%202019&text=Globally%2C%20infectious%20diseases%2C%20including%20pneumonia,death%20for%20children%20under%20five;); <https://data.unicef.org/>. For the prospect of using drugs as a means of enhancing humans, see Evangelos D. Protopapadakis, "In Defense of Pharmaceutically Enhancing Human Morality," *Current Therapeutic Research* 86 (2017): 9-12.

<sup>50</sup> See Peter Sloterdijk, *Critique of Cynical Reason* (Minneapolis and London: University of Minnesota Press, 2001).

<sup>51</sup> Article 12b of the *Universal Declaration on the Human Genome and Human Rights* reads: "Freedom of research, which is necessary for the progress of knowledge, is part of freedom of thought. The applications of research, including applications in biology, genetics and medicine, concerning the human genome, shall seek to offer relief from suffering and improve the health of individuals and humankind as a whole." *Universal Declaration on the Human Genome and Human Rights*, <http://unesdoc.unesco.org/images/0012/001229/122990eo.pdf>.

<sup>52</sup> Consult AAAS Committee on Scientific Freedom and Responsibility, *Scientific Freedom and Responsibility* (Washington, DC: American Association for the Advancement of Science, 1975), 5, <https://www.aaas.org/sites/default/files/SRHRL/PDF/1975-Scientific-FreedomResponsibility.pdf>.



The existing largely heteronomous prohibitions, although necessary, are not sufficient if the scientists themselves do not develop the awareness that they should follow the general humanistic moral principles and principles of scientific criticality. In complex times of strengthening social technical and technological effects of science, it is necessary to bioethically codify the issue of social responsibility of scientists, which because of its adequate internalization must be an integral part of their *paideia* from the earliest days. It is very important that scientists and philosophers in their conclusions and insights which, especially in humanities, often have the character of value beliefs, do not go below the achieved civilization standards of ethical and moral culture, and that they consider various topics with due care and awareness of the dilemmas that can be encountered in their professional work. An appropriate interdisciplinary, multidisciplinary, transdisciplinary and pluri-perspective approach should ultimately result in a more delicate and responsible attitude of the scientists themselves towards the possibilities of their own scientific discipline and the significance of its effects.



### III. Human Cloning: Professional-Philosophical or Cultural-Civilizational Aporia

A good example of how the functioning of the modern world is aporetic, in terms of transferring from a principled consensus on the need to preserve our planet and the welfare of mankind to a concrete unified reality, is the *Declaration on Human Cloning*<sup>53</sup> (No. 59/280) adopted at the 82<sup>nd</sup> plenary session of the Organization of United Nations (OUN) held on March 8, 2005. The Declaration represents the culmination of nearly four years of continuous efforts that, since 2001, were undertaken by France and Germany to have a convention against human reproductive cloning<sup>54</sup> adopted.

This negotiation was initially devised as a purely bioethical debate that was supposed to lead to a general agreement to ban

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<sup>53</sup> The term 'cloning' originates from the Greek masculine noun κλών or κλάδος, which can be translated as "young shoot," "twig," while in the New Testament, this word means "offspring." One of the definitions of cloning is: "Cloning of an organism commonly involves a technique called somatic cell nuclear transfer, where the nucleus of an egg cell (containing its genetic material) is removed and replaced with the nucleus of a somatic cell taken from the body of an adult. If the reconstructed egg cell is then stimulated successfully to divide, it may develop to the pre-implantation blastocyst stage. In reproductive cloning, the cloned blastocyst is then implanted in the uterus of a female and allowed to continue its development until birth. However, in cloning for research or therapeutic purposes, instead of being implanted in the uterus the cloned blastocyst is converted into a tissue culture to make a stem cell line for research or clinical applications." InterAcademy Partnership, "Statement Calling for a Ban on Human Reproductive Cloning," <http://www.interacademies.org/13930/IAP-Statement-Calling-for-a-Ban-on-Human-Reproductive-Cloning>. Consult Evangelos D. Protopapadakis, *Creating Unique Copies: Human Reproductive Cloning, Uniqueness, and Dignity* (Berlin: Logos Verlag, 2023); Ljiljana Zergollern-Čupak, *Bioetika i biomedicina* (Zagreb: Pergamena, 2006).

<sup>54</sup> There is a general, if not absolute agreement, in the international community on the view that reproductive cloning, for the purpose of creating new human beings, is a deeply immoral and unethical act. Arguments against reproductive cloning are of technical and medical nature such as weakening and undermining of the original idea of producing offspring and the concept of family, the unclear relationship between the cloned baby and its "creator," confusable personal identity and possible disturbance of psychological development of the cloned baby, eugenic questions, promoting the creation of babies and their "enhancement," belief that reproductive cloning contradicts human dignity. The key argument that goes in favour of reproductive cloning is the increase of favourable reproduction possibilities. By helping infertile people with cloning one promotes their welfare, preserves their autonomy and satisfies their natural desire for producing offspring. See Carson Strong, "Cloning and Adoption: A Reply to Levy and Lotz," *Bioethics* 22, no. 2, (2008): 130-136; Michele Aramini, *Uvod u bioetiku* (Zagreb: Kršćanska sadašnjost, 2009), 151-166.

human cloning. However, it was more often conducted in the form of a discussion on human rights, cultural, civilizational and religious differences between people, their interaction and the issue of who, or what enjoys a priority in potential conflicts between different value systems. Neither the Declaration nor the negotiation process has led to answers to these complex questions. Instead, they provided an insight into the issues, even though a superficial one, and showed that international law lapses into contradiction whenever expert argumentation does not prevail during the debate, or whenever political and other differences become the focus of the discussion.

Acknowledging the fact that, at that point, only a small number of scientists and institutions had the required level of technical knowledge, Germany and France believed that human cloning for reproductive purposes could impact the entire human species, so they demanded broad action. Because they were looking for global instruments for action that would produce relevant normative acts, these two countries wanted this task to be entrusted to the UN General Assembly, instead of being implemented by some specialized agencies, such as the World Health Organization or UNESCO. It was expected, both because of the standpoints of the Council of Europe<sup>55</sup> and because of the UNESCO Declaration,<sup>56</sup> that the negotiations

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<sup>55</sup> In the *Additional Protocol* adopted by the Council of Europe in January 1998 (Europ. TS No. 168) the accompanying *Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine, on the Prohibition of Cloning Human Beings*, Article 1 reads: “1. Any intervention seeking to create a human being genetically identical to another human being, whether living or dead, is prohibited. 2. For the purpose of this article, the term human being ‘genetically identical’ to another human being means a human being sharing with another the same nuclear gene set.” *Additional Protocol to the Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine, on the Prohibition of Cloning Human Beings*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/rms/090000168007f2ca>.

<sup>56</sup> Article 11 of the *Universal Declaration on the Human Genome and Human Rights* specifies: “Practices which are contrary to human dignity, such as reproductive cloning of human beings, shall not be permitted. States and competent international organizations are invited to co-operate in identifying such practices and in taking, at national or international

would be short-term, and that the positions would be quickly and easily formulated into a clear and binding convention.

Given that the consideration of these issues was a novelty and given the unfamiliarity with the medical and technical terminology, the negotiations in 2002 began with scientists and philosophers reporting on the basic mechanisms of the cloning process,<sup>57</sup> and its ethical implications.<sup>58</sup> The problem initially concerned only the countries involved in genetic research or that could implement it. Some of them thought that the Franco-German initiative was acceptable because it aimed at banning human cloning, which everyone agreed on, leaving aside stem cell research and “therapeutic cloning.”<sup>59</sup> Other countries did not believe that there was a difference between the two types of cloning, since both involved manipulation of the human embryo.<sup>60</sup> The discussion quickly moved from the field of cloning to the discussions about the issue of when human life begins, what is a “human being,” and the dilemmas related to abortion but also about the understanding of human rights,<sup>61</sup>

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level, the measures necessary to ensure that the principles set out in this Declaration are respected.” *Universal Declaration on the Human Genome and Human Rights*, <http://unesdoc.unesco.org/images/0012/001229/122990eo.pdf> (this Article (11) will be emphasized in the second part of the text for the purpose of analysing the *United Nations Declaration on Human Cloning*). Consult *Unesco i bioetika*, zbirka osnovnih dokumenata (Center for Ethics and Law in Biomedicine, 2008), 6.

<sup>57</sup> See Stephen G. Post, ed., *Encyclopedia of Bioethics*, 3<sup>rd</sup> edition (New York: Macmillan Reference USA, 2004), 447-467.

<sup>58</sup> Jürgen Habermas tends to argue that ethics is the best approach to solving the problem of cloning. Namely, as long as it is a consequence of human action, it remains within the framework of human responsibility and thus ethics. Jürgen Habermas, *Postmetafizičko mišljenje* (Beograd: Beogradski krug, 2002).

<sup>59</sup> Some scientists are referring to therapeutic cloning as “cloning for research purposes,” or “research cloning.” The intention is to avoid the use of the term “therapeutic,” which, according to them, may imply positive connotations, but which has not been proven so far, therefore a more neutral syntagm is being proposed. Nevertheless, therapeutic cloning is expected to help address various serious and chronic diseases, most commonly Parkinson’s disease, Alzheimer’s disease or diabetes. The major bioethical issue regarding therapeutic cloning concerns discussions about the moral status of embryos.

<sup>60</sup> Consult also Andrew I. Cohen and Christopher H. Wellman, eds., *Contemporary Debates in Applied Ethics* (Oxford: Blackwell Publishing, 2005), 141-158.

<sup>61</sup> Also, new rights have been introduced in the debate on human cloning; see Evangelos

freedom of opinion and freedom of scientific research,<sup>62</sup> topics about which there is not even a far-fetched agreement in the international community.

In an attempt to obtain the agreement of several countries, France and Germany supplemented their original proposal to ban human cloning for reproductive purposes with the idea of including the regulation of stem cell research.<sup>63</sup> Their proposal immediately received support from Belgium, China, India, Japan, Russia, Singapore, South Korea, and the United Kingdom, the countries that were already involved in stem cell research or had intended to orient their research in that direction. A counterproposal for a convention banning all forms of cloning has been proposed by Costa Rica and supported by the Vatican, Italy, Portugal, Spain and the United States. These countries, certainly, also made certain concessions to make their proposal more acceptable to a larger number of countries. To that end, the transfer of nuclei or other cloning techniques to obtain DNA molecules, organs, plants, animals, tissues and cells other than human embryos were excluded from the proposal of a general ban. The gap between the mentioned groups of states was very pronounced, and the only thing they were interested in was not the reconciliation of opposing positions but lobbying for their own proposal among other undecided states. After facing such a dead-end situation, Iran's proposal, on behalf of the Organization of the Islamic Conference (OIC), to

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D. Protopapadakis, "Clones, Prototypes, and the Right to Uniqueness," *Agrafa - Journal of Philosophy of Psychoanalysis* 1, no. 2 (2013): 40-47.

<sup>62</sup> At the end of the previous chapter ("Bioethics and Hereditary Genetic Modifications"), the Article 12b of the *Universal Declaration on the Human Genome and Human Rights* was emphasized in a similar aspect. In addition, parts of the *Universal Declaration of Human Rights* (Articles 18 and 19) were cited ([https://www.un.org/en/udhrbook/pdf/udhr\\_booklet\\_en\\_web.pdf](https://www.un.org/en/udhrbook/pdf/udhr_booklet_en_web.pdf)) and the *International Covenant on Economic, Social and Cultural Rights*, Art. 15 (3), <https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx>, in support of the arguments why research related to therapeutic cloning should be continued.

<sup>63</sup> See Bonnie Steinbock, ed., *The Oxford Handbook of Bioethics* (Oxford: Oxford University Press, 2007), 416-440.

postpone the negotiations between the opposing camps for two years, more precisely until 2005 was accepted.<sup>64</sup>

The publicity that the dispute started to gain led to an increased public interest in the overall issue. NGOs that supported the inalienable right to life were, of course, on the side of a comprehensive ban on cloning. Scientific organizations and many scientists, on the other hand, were concerned that this radicalization of attitudes would lead to stem cell research being limited or abandoned altogether.<sup>65</sup> The InterAcademy Panel on International Issues (IAP), an association of (then) sixty national academies of science in different parts of the world,<sup>66</sup> stated on September 22, 2003, opposing the ban on therapeutic cloning and supporting the ban on human reproductive cloning. Their proposal to the negotiating team at the UN, supported by the International Federation of Societies of Human Genetics, was not to disregard the importance of scientific research and the development of potential ways of treating people with the help of cloning.<sup>67</sup>

The key group of countries from the Organization of the Islamic Conference finally decided that they could accept only a declaration for which a consensus would be reached. This accelerated the negotiations between the opposing parties about the text of the resolution that would be acceptable to everyone. After many reversals, a compromise version proposed by Honduras was accepted, with Belgium's amendment to the first preamble paragraph [UN Doc. A/C.6/59/SR.28, par. 42 (2005)]. The long negotiations and compromises reached provided an

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<sup>64</sup> The proposal was accepted by a narrow majority, with only one vote more (80 countries were in favour and 79 against, with 15 abstentions).

<sup>65</sup> On the paradoxes of cloning consult Leon R. Kass and James Q. Wilson, *The Ethics of Human Cloning* (Washington, DC: The AEI Press, 1998), 61-74.

<sup>66</sup> Today, over 140 national, regional and global member academies are united under the new "umbrella" organization InterAcademy Partnership. For more details see <http://www.interacademies.org/31840/About>.

<sup>67</sup> Consult the first chapter of this book "I. Science versus Bioethics: Principles and Values," especially the claims of Carl Friedrich von Weizsäcker.

opportunity for both sides to declare a ‘victory’ in some way, and to be able to interpret the paragraphs per their views. To illustrate how much the positions had changed since the initial one and throughout the long negotiation process, it would be sufficient to say that even the initial proponents disagreed about the final vote. France voted against the Declaration and Germany in favour of the Declaration!

Two close allies on many issues, Britain and the United States, also found themselves on opposite sides. The British argued that they could not support a political declaration that could be interpreted as banning all forms of human cloning. An additional British argument was that a consensus on therapeutic cloning should be reached in each country individually, bearing in mind the potential benefits of new procedures for millions of people. Finally, the British were of the opinion that the adopted Declaration was non-binding and did not reflect the consensus within the UN General Assembly. The United States, on the other hand, felt that, through the Declaration, the international community had reaffirmed its contempt for human cloning and committed itself to protecting the sanctity of human life and respect for human dignity.<sup>68</sup> The Americans understood the Declaration as an invitation to all members of the United Nations to introduce laws that would immediately ban all forms of human cloning. The U.S. pointed out that the activity of the Sixth Committee was an important step on the path to achieving a culture of life, by ensuring that scientific achievements are in function of human dignity at any circumstances.

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<sup>68</sup>The very notion of human dignity is not specifically defined in this context, except that the proponents of a general ban on all forms of cloning have linked this notion to the asexual creation of human beings. The representative of the Vatican, however, tried to define dignity as an intrinsic value that is common and equal for all human beings, regardless of their social, intellectual or physical condition. Human dignity is also related to Immanuel Kant’s second formulation of the categorical imperative, i.e. with the fact that the creation of children by cloning could cause the treatment of offspring as objects, i.e. consumables like a house or a car. See Hilary Putnam, “Cloning People,” in *The Genetic Revolution and Human Rights*, ed. Justine Burley, 1-13 (Oxford: Oxford University Press, 1997).



The *United Nations Declaration<sup>69</sup> on Human Cloning<sup>70</sup>* is concise, consisting of eight preamble and six operational paragraphs. The language of the Declaration itself is general, and each of its main paragraphs is marked by gradual transitions, cautious formulations and references to key terms. This shows that during the negotiations, an attempt was made to reach a balance between conflicting and difficult to reconcile definitions of human life which were presented by the opposing parties. Perhaps because of that, a Declaration was produced which, instead of expressing consensus on the issue of human cloning or the beginning of human life, does not define any of these terms. After being read carefully, it leads to a seemingly unexpected outcome, i.e. the Declaration neither defines nor directly and unconditionally bans human cloning, including cloning for reproductive purposes!

The only reference to reproductive cloning can be found in the second preamble paragraph, which states:

Recalling the Universal Declaration on the Human Genome and Human Rights, adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organization on 11 November 1997, and in particular article 11 thereof, which states that practices which are contrary to human

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<sup>69</sup> The Declaration, as a less binding document, has been adopted instead of the originally envisaged convention. The full name of the Declaration is the *United Nations Declaration on Human Cloning*, <https://digitallibrary.un.org/record/541409?ln=en>.

<sup>70</sup> Since then, 191 member states have voted in favour of the *United Nations Declaration on Human Cloning*, with 84 countries voting against it. A total of 37 countries abstained, while representatives of 36 countries were absent when voting on the text of the *Declaration*. Representatives of Australia, Austria, Bosnia and Herzegovina, Chile, Croatia, Malta, Mexico, Slovenia, Switzerland, and North Macedonia, among others, voted for the *Declaration*. Some of the countries that voted against the adoption of the *Declaration* are Brazil, Canada, China, Denmark, India, Japan, Netherlands, Norway, Singapore, and Spain. The following countries abstained: Argentina, Egypt, Indonesia, Iran, Israel, Romania, Serbia and Montenegro, South Africa, Turkey, and Ukraine. The following were not present: Armenia, Ghana, Greece, Libya, Nigeria, Peru, Russia, Turkmenistan, Venezuela, and Vietnam.

dignity, such as the reproductive cloning of human beings, shall not be permitted.<sup>71</sup>

The remaining paragraphs in the preamble speak generally about the application of “life sciences.” The phrase ‘life sciences’ was opposed by the delegations of the countries that advocated that the *Declaration on Human Cloning* needs to be narrowed down and reformulated into a declaration on human cloning for reproductive purposes. According to them, the negotiation process was never focused on the discussion of “life sciences” in general, with the addition that it is not clear even what the mentioned term encompasses, nor what it means.<sup>72</sup> Life sciences are simply mentioned in the preamble part of the Declaration regarding concerns about “human dignity,” “human rights,” “fundamental freedoms of individuals,” as well as “relief from suffering,” “improving the health of individuals and humankind as a whole,” and “benefit of all.” Whatever life sciences mean, they should therefore be understood in the context of the terms with which they are associated, and with “human dignity.” This is particularly pronounced in the last, eighth preamble paragraph, which states that the General Assembly:

Convinced of the urgency of preventing the potential dangers of human cloning to human dignity.<sup>73</sup>

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<sup>71</sup> *United Nations Declaration on Human Cloning*, <https://digitallibrary.un.org/record/541409?ln=en>.

<sup>72</sup> More details about closer understanding of ‘life sciences’ can be found in the footnote (No. 42) in Ivan Šegota’s text on the new definition of bioethics (consult Ivan Šegota, “Nova definicija bioetike,” in *Izazovi bioetike*, ur. Ante Čović (Zagreb: Pergamena, 2000), 22. He, with some reservations, suggests that the phrase “life sciences” can be translated by the phrase “prirodne znanosti,” although he is aware that there is also a coinage term of “natural sciences” for this scientific field in English. However, when Šegota lists some of the sciences that belong to the “life sciences” (physics, cell biology, chemistry, microbiology, molecular biology, biochemistry, genetics, immunology, neurology, oncology, pathology, toxicology, pharmacology, nutrition, psychology), it becomes more clear why he adds in the text below that it is “really difficult to find a Croatian substitute for ‘life sciences’” (trans. Željko Kaluđerović).

<sup>73</sup> *United Nations Declaration on Human Cloning*, <https://digitallibrary.un.org/record/541409?ln=en>.

The words that allow for a variety of interpretations in this paragraph are “potential dangers” and “human dignity.” The careful choice of the wording in the Declaration is also visible in emphasizing the word potential in front of dangers, suggesting that the danger that human cloning can cause to human dignity can be interpreted as potential, i.e. only as possible.

Two very important paragraphs of the second operational part of the Declaration, paragraphs ‘a’ and ‘b,’ brought consultations between the opposing parties to a fever pitch until the very end of the negotiation process. Paragraph (a) reads:

Member States are called upon to adopt all measures necessary to protect adequately human life [emphasis by me] in the application of life sciences.<sup>74</sup>

This paragraph was supported by delegations that voted in favour of the comprehensive ban on cloning, but it was strongly opposed by those countries that supported the ban on cloning for reproductive purposes only. Why is it so, since it doesn’t even mention human cloning? Namely, it refers to the protection of human life in the application of life sciences. The reason for opposing this paragraph probably is the fact that the phrase “to protect ... human life” implies the possibility of a broader interpretation, including, for example, an interpretation that includes the prohibition of abortion. The paragraph has also been criticized for confusing the scientific definition of “human life” with the definition of “human being,” which should be subject to legal regulation. During the negotiations, the adverb “adequately” was inserted to modify the verb “to protect,” to emphasize that the coinage “to protect adequately human life” differs from the potential “full protection of hu-

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<sup>74</sup> *United Nations Declaration on Human Cloning*, <https://digitallibrary.un.org/record/541409?ln=en>.

man life.” The delegations of the countries that were exclusively in favour of banning reproductive cloning could not accept paragraph (a), even with this subtle addition. In their opinion, therapeutic cloning includes or encompasses the human embryo, which from a scientific point of view could be defined as a “form of human life” but not as a “human being.” These countries simply could not agree with the wording that requires the protection of all “forms of human life.”<sup>75</sup>

Paragraph (b) is the only operational paragraph prohibiting human cloning, although it also contains a significant diminution of the original wording. It reads:

Member States are called upon to prohibit all forms of human cloning inasmuch as [emphasis by me] they are incompatible with human dignity and the protection of human life.<sup>76</sup>

This paragraph has also been the subject of debate by the states that have supported a ban on reproductive cloning only. Although the phrase “all forms of human cloning” is broad and includes human reproductive cloning, it has been mitigated and modified by the addition of the word “inasmuch as.” This term in English was chosen because it covers several possible meanings, so in one sense it can mean “because,” or “since,” and in another context, it can mean “if,” or “to the extent,” so that everyone can choose the appropriate interpretation according to their own preferences. The version of the translation in which “inasmuch as” is understood as “because” (“Member States are called upon to ban all forms of human cloning because they are incompatible with human dignity and the protection of human

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<sup>75</sup> Belgium, which led the countries opposing this paragraph, demanded its deletion or annulment, but its proposal was rejected in the Sixth Committee (with 57 to 48 votes, with 42 abstentions).

<sup>76</sup> *United Nations Declaration on Human Cloning*, <https://digitallibrary.un.org/record/541409?ln=en>.

life”) is a call for a total ban on human cloning. An alternative translation, where “inasmuch as” is interpreted as “if” (“Member States are invited to ban all forms of human cloning if they are incompatible with human dignity and the protection of human life”), allows the possibility that there are forms of human cloning that can be “compatible” with human dignity and the protection of human life.<sup>77</sup>

Despite several restrictions and modifications, paragraph (b) was not acceptable to many delegations, especially those that supported the ban only on reproductive cloning. Their objections were directed to the fact that paragraph (b) did not explicitly prohibit the reproductive cloning of humans and that it repeated the words “protection of human life,” which had already been sufficiently explained in paragraph (a). For delegations that supported a comprehensive ban on human cloning, paragraph (a) refers to the application of life sciences and does not mention the explicit cloning of people and things mentioned in paragraph (b). Belgium led the countries that also opposed paragraph (b), and proposed an amended version of this paragraph: “Member States are called upon to prohibit the reproductive cloning of human beings; they are also called upon to prohibit other forms of human cloning inasmuch as they are incompatible with human dignity.”<sup>78</sup> This proposal recognizes various forms of cloning that are based on intent (reproductive or therapeutic), and prohibits reproductive cloning and other forms of cloning (therapeutic) if they are incompatible with human dignity. Probably because the proposal is less ambiguous and because it does not mention human life, it was not acceptable to countries that advocated a complete ban on cloning and was rejected by the Sixth Committee.<sup>79</sup>

<sup>77</sup> The words “protection of human life,” can also be understood in the context with the adverb “adequately.”

<sup>78</sup> This sentence and parts of comments have been taken and paraphrased from Mahnouch H. Arsanjani, “Negotiating the UN Declaration on Human Cloning,” *American Journal of International Law* 100, no. 1 (2006): 164-179.

<sup>79</sup> With a slim majority of 55 to 52 votes, with 42 abstentions.

The next paragraph (c) calls on Member States to take the necessary measures to prohibit the use of genetic engineering techniques<sup>80</sup> that could be contrary to human dignity.

Paragraph (d), to some extent, repeats the parts of the seventh paragraph from the preamble, calling on Member States to take measures to prevent the exploitation of women, with the addition of “in the application of life sciences.”

Paragraph (e) invites Member States to adopt and implement in their national legislation paragraphs (a) to (d) without delay.

The last paragraph (f), proposed by a group of African states, does not apply to human cloning at all. It calls on Member States to consider, when funding medical research, including life sciences, the urgency of addressing some global issues such as HIV/AIDS, tuberculosis and malaria which particularly affect developing countries. The original proposal was aimed at redirecting funds for stem cell research (including adult stem cells) to these truly urgent global health issues. However, the final text has been clarified and generalized and does not invite anyone to change its national legislation towards this direction. This paragraph reveals the diversity of priorities of countries with relatively low levels of health care concerning middle and highly-developed countries.<sup>81</sup>

Negotiations at the United Nations on a declaration banning human cloning have shown that bioethical dilemmas and scientific discourse are relatively easily replaced by statements that are not primarily driven by the interests of the profession and the needs of the human species but are significantly influenced by political, economic, cultural and religious characteristics of groups of states or individual states. The attempt to universalize standards around one, from a scientific perspective, sophisticated problem, for UN Member States, has shown significant

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<sup>80</sup> Some aspects of these techniques will be discussed in the chapter “V. Genetically Modified Crops: Great Hope or Great Deception.”

<sup>81</sup> Real problems of African countries in the field of medicine, i.e. in the health sphere are described in more detail in the previous chapter.

differences and divergences in their scientific and technological development and priorities. Therefore, no non-binding declaration could be adopted without numerous compromises and ambiguities, which significantly relativized the initial intention of the proposing countries. Perhaps it would be better, according to this author, if the bioethical discussion on the issue of cloning and potential subsequent regulations were first left to experts and relevant expert bodies,<sup>82</sup> and then, after detailed informing the public, submitted to relevant supranational institutions for further consideration.

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<sup>82</sup>The then Director-General of UNESCO, Koïchiro Matsuura, believed that scientists and bioethicists should play a leading role in discussions about cloning and the fundamental ethical issues concerning cloning that are of interest to all mankind. He adds that other subjects, such as public opinion, should play a significant role in the general ethical debate on such an important issue. See *Human Cloning Ethical Issues* (Paris: UNESCO, 2005): 5.





## IV. Non-human Living Beings: Moving Objects or Moral Subjects

Man's unique dignity<sup>83</sup> also generates his unique rights. In that sense, Article 1 of the Universal Declaration of Human Rights from 1948 states:

All human beings are born free and equal in dignity and rights.<sup>84</sup>

In Article 23 of the Constitution of the Republic of Serbia [Ustav Republike Srbije] the constitution-maker states:

Human dignity is inviolable, and everyone is obliged to respect and protect it.<sup>85</sup>

This is not only an ontological statement, but at the same time a source of the law and therefore Article 3 of the Constitution stipulates:

The rule of law is a fundamental prerequisite for the Constitution which is based on inalienable human rights.<sup>86</sup>

The highest-ranking legal act of Serbia seems to be based on the postulates of Immanuel Kant's ethics, which strived to reach the highest ethics, while it developed the dignity of living beings and the rights stemming from it only for people, and thus indirectly contributed to the fact that until relatively recently the

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<sup>83</sup> On the concept of dignity see the chapter "I. Science versus Bioethics: Principles or Values" and also chapter "III. Human Cloning: Professional-Philosophical or Cultural-Civilizational *Aporia*."

<sup>84</sup> *The Universal Declaration of Human Rights*, <http://www.un.org/en/universal-declaration-human-rights/>.

<sup>85</sup> *Constitution of the Republic of Serbia*, trans. Željko Kaluđerović (Beograd: Kancelarija za saradnju s medijima Vlade Republike Srbije, 2006), 9.

<sup>86</sup> *Ibid.*, 4.

“dignity” of animals<sup>87</sup> and “rights”<sup>88</sup> of animals<sup>89</sup> were never mentioned.

If one attempts to summarize the basic views of the leading authors Peter Singer,<sup>90</sup> Tom Regan<sup>91</sup> and Klaus Michael Meyer-Abich,<sup>92</sup> which are representative of present discussions of the new regulation of human-animal relationships, then the main views are as follows:

a. Animals are beings that are capable of suffering,<sup>93</sup>

<sup>87</sup> The definition of ‘animal’ cannot be easily or unambiguously determined. According to the *European Convention for the Protection of Vertebrate Animals used for Experimental and Other Scientific Purposes*: “‘Animal’ ... means any live non-human vertebrate, including free-living and/or reproducing larval forms, but excluding other foetal or embryonic forms.” In the Preamble of this convention, it is stated that animals have the capacity not only for suffering but also for memory, so therefore man has a moral obligation to respect all animals. *European Convention for the Protection of Vertebrate Animals Used for Experimental and Other Scientific Purposes*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/123>. In Article 5, point 13 of the *Law on Animal Welfare of the Republic of Serbia* (Zakon o dobrobiti životinja Republike Srbije), for example, ‘animal’ is defined reductively but unambiguously as any vertebrate which has the capacity to feel pain, suffering, fear and stress. *Law on Animal Welfare of the Republic of Serbia*, [http://www.paragraf.rs/propisi/zakon\\_o\\_dobrobiti\\_zivotinja.html](http://www.paragraf.rs/propisi/zakon_o_dobrobiti_zivotinja.html).

<sup>88</sup> On the relationship of the ‘rights’ of animals and ‘welfare’ of animals consult *Encyclopedia of Bioethics 3rd edition*, ed. Stephen G. Post (New York: Macmillan Reference USA, 2004), 183-215; Damir Marić, *Etika životinja* (Sarajevo: Zalihica, 2010), 195-217.

<sup>89</sup> See Boris Sirilnik, Elizabet de Fontene, and Piter Singer, *I životinje imaju prava* (Novi Sad: Akademski knjiga, 2018), 15-97.

<sup>90</sup> Peter Singer, *Practical Ethics* (New York: Cambridge University Press, 2011); Peter Singer, *Writings on an Ethical Life* (New York: HarperCollins Publishers Inc., 2001).

<sup>91</sup> Tom Regan, *The Case for Animal Rights* (Berkeley: University of California Press, 2004); Tom Regan, *All That Dwell Therein* (Berkeley: University of California Press, 1982).

<sup>92</sup> Klaus Michael Meyer-Abich, *Praktische Naturphilosophie* (München: C. H. Beck, 1997); Klaus Michael Meyer-Abich, *Wege zum Frieden mit der Natur* (München und Wien: Hanser, 1984).

<sup>93</sup> In a classic passage about the non-human part of animal creatures, which, as is often stated, is a departure from the mainstream of Western philosophy, Jeremy Bentham writes: “The day may come when the non-human part of the animal creation will acquire the rights that never could have been withheld from them except by the hand of tyranny. The French have already discovered that the blackness of the skin is no reason why a human being should be abandoned without redress to the whims of a tormentor. Perhaps it will some day be recognised that the number of legs, the hairiness of the skin, or the possession of a tail, are equally insufficient reasons for abandoning to the same fate a creature that can feel? What else could be used to draw the line? Is it the faculty of reason or the possession of language? But a full-grown horse or dog is incomparably

with their own interests and needs that are similar to the basic needs of people.

b. If there is such similarity, the principle of equality requires that the interests of animals be respected as well as the similar interests of humans.

c. Animals have their own value, which for some (Singer and Regan) stems from their consciousness, while others (Meyer-Abich) attribute additional importance to the affinity of animals and humans.<sup>94</sup>

Singer talks about animals – “personalities,” and Regan about “subjects of life.” Both of them derive from the “rights” of animals based on their type of treatment and protection of their lives, which is why it is forbidden to kill them for eating.<sup>95</sup> Meyer-Abich speaks of the “dignity” of animals, and from that derives the “rights” of animals, which prohibit the keeping of animals in massive farming,<sup>96</sup> but not the killing of animals after a life that was suitable for an animal, to feed people. It is noted that these basic thoughts are partially overlapping, but also that the results diverge at the central point of the killing of animals.

Is it enough if Meyer-Abich, to explain his opinion, indicates that the condition of our existence to live for the rest of our lives, and that, in the end, vegetarians also eat life by eating plant foods?<sup>97</sup> Is it advisable when Regan, to explain his

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more rational and conversable than an infant of a day, or a week, or even a month old. Even if that were not so, what difference would that make? The question is not Can they reason? or Can they talk? but Can they suffer?” Jeremy Bentham, *An Introduction to The Principles of Morals and Legislation*, <https://www.earlymoderntexts.com/assets/pdfs/bentham1780.pdf>, 144.

<sup>94</sup> For the antecedents of deviations from the anthropocentric vision of the world see Željko Kaluđerović, “Empedocles on Ensouled Beings,” *Conatus – Journal of Philosophy* 8, no. 1 (2023): 167-183.

<sup>95</sup> Joseph R. des Jardin states critical views on Singer’s and Regan’s views. Džozef R. de Žarden, *Ekološka etika* (Beograd: Službeni glasnik, 2006), 193-200.

<sup>96</sup> On industrial livestock production consult: Tomislav Krznar, *Znanje i destrukcija* (Zagreb: Pergamena, 2011), 158-162.

<sup>97</sup> Klaus Michael Meyer-Abich, *Praktische Naturphilosophie* (München: C. H. Beck, 1997),

contrary opinion, indicates that all mammals have an “inherent value”<sup>98</sup> that makes them “subjects of life” because of their consciousness, thereby providing them with “rights” in which man should not interfere, with the exception of severe cases of conflict like the necessary defence?

Aiming to ensure that the demands for higher or lower “rights” of animals, would not remain only calls without any prospect of success, it should be clarified to what extent they are compatible with the frequent thinking about bioethics, and to what extent they can be realized in practical and political frameworks. In other words, what is lost and whether anything is lost, if the “dignity” of animals and the corresponding animal “rights” are also recognized in addition to human dignity and human rights.

From the philosophical aspect, at first glance understandably tense situation greatly diminishes, since most Western philosophers have believed and/or believe that, as already mentioned, only human beings have moral dignity, given that the required legal equality of men and animals does not mean that life is equal to life in any case. Regan explains this with his famous example of a packed lifeboat in which there are several people and one big dog.<sup>99</sup> It is assumed that the boat could be kept afloat only if one of the passengers would be thrown from the deck into the river or the sea. To the regret of all animal lovers and to the joy of all anthropocentrists, Regan “throws” the dog from the deck – surely with a heavy heart, but with the justification that the damage that death brings with it for one individual consists in the loss of its life opportunities and that these are greater for a man than for a dog. If a collision occurs, the value

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426. See the second part of the already mentioned article Željko Kaluđerović and Ana Miljević, “Stagiranin, Erešanin i ne-ljudska živa bića,” *ARHE* XVI, no. 31 (2019): 105-131.

<sup>98</sup> Tom Regan, *The Case for Animal Rights* (Berkeley: University of California Press, 2004), 243.

<sup>99</sup> Tom Regan, “The Dog in the Lifeboat: An Exchange,” *The New York Review*, April 25, 1985, <http://www.nybooks.com/articles/1985/04/25/the-dog-in-the-lifeboat-an-exchange/>.

of the lives of different individuals must be measured, and individuals with more modest possibilities of experience should be sacrificed to the individuals with a wider life horizon and a higher value of life that goes with it. A common hierarchy of values that stems from the primacy of man remains unchanged if a disputable case arises.<sup>100</sup>

Neither the circumstance that animals cannot take responsibility and cannot make autonomous decisions, from the point of view of non-anthropocentrists, does not have to be an obstacle to the approval of the appropriate “rights” to them. However, according to the anthropocentric concept of rights, a legal subject may only be a being that at the same time may be the subject of duty, which can therefore be conscious of its duties and which can fulfil them.

The German philosopher Leonard Nelson regarding the symmetry of the law and duty that reflects upon Kant, already at the beginning of the last century warned that for a certain legal subject is less constitutional to have the interests that could be injured than for some subject of duty. Following this, Nelson develops a maxim that speaks of Kant’s categorical imperative,<sup>101</sup> in the sense that one never acts so that he cannot approve of his method of action, and even if the interests affected by his actions are his own.<sup>102</sup> This philosopher, by broadening Kant’s

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<sup>100</sup> This does not mean that the notion of conflict can easily stretch to cases where a person wants to kill an animal to eat it, although he could be fed in another way. In other words, according to this interpretation, the basic right of the animal to life should have priority over the mere interest of man to eat with the greatest possible pleasure. A similar assessment can also be found in Singer, who condemns the killing of animals for the purpose of eating unless it is necessary for the survival of man.

<sup>101</sup> Immanuel Kant, *Groundwork for the Metaphysics of Morals*, trans. Allen W. Wood (New Haven and London: Yale University Press, 2002), 4:416-4:421, 4:424-4:425, 4:440-4:444. See also Allen W. Wood, “What is Kantian Ethics,” in Immanuel Kant, *Groundwork for the Metaphysics of Morals*, trans. Allen W. Wood (New Haven and London: Yale University Press, 2002), 163-164.

<sup>102</sup> Leonard Nelson, *Kritik der praktischen Vernunft*, 2. Aufl., in Leonard Nelson, *Gesammelte Schriften in neun Bänden*, hrsg. von P. Bernays, W. Eichler, A. Gysin, G. Heckmann, G. Henry-Hermann, F. von Hippel, S. Körner, W. Kroebel und G. Weisser, Band 4 (Hamburg: Felix Meiner, 1972), 133.

concept of law, does not proceed towards the mind-governed person as the sole proprietor of rights but introduces also all individuals that are governed solely by interests. All holders of interest are, according to Nelson, at the same time personalities. Then, he states that each person, as such, has a dignity that is equal to the dignity of any other person. From this, the person's subjective right is exercised to respect its interests. According to this fundamental approach to personal dignity, any being who has interests, that is, every person, has the right to respect their interests. This right is the right of personality. Every person is a subject of law because it is by its notion one subject of interest, follows from Nelson's view.<sup>103</sup>

Such clauses of the opening of an order on the equal treatment of human and animal interests make it acceptable and possible to recognize the "dignity" of animals and to install the "rights" of animals, without violating human dignity and human rights.<sup>104</sup> Nevertheless, the acceptance of animals into

<sup>103</sup> Nelson explicitly states that there is no general, philosophically grounded order that, because of the interests of animals, one should ignore one's own interests. Thus, it may very well be permissible to hurt the interests of an animal if it would be harmed by some prevailing interest of people. This, consequently, also applies in the case when it is not possible otherwise to preserve an interest in one's own life, or to maintain one's own spiritual and physical strength, but by destroying the life of an animal. Leonard Nelson, *System der philosophischen Ethik und Pädagogik*, 3. Aufl., in Leonard Nelson, *Gesammelte Schriften in neun Bänden*, hrsg. von P. Bernays, W. Eichler, A. Gysin, G. Heckmann, G. Henry-Hermann, F. von Hippel, S. Körner, W. Kroebel und G. Weisser, Band 5, aus dem Nachlass hrsg. von G. Hermann und M. Specht (Hamburg: Felix Meiner Verlag, 1970), 174.

<sup>104</sup> When Aristotle in *Rhetoric* (1373b4-17) talks about the special (ἴδιον) and general (κοινόν) laws (νόμον), the general laws he simply called natural laws (κοινόν δὲ τὸν κατὰ φύσιν). The explanation of natural laws is linked with general understandings of the just and unjust in harmony with nature, which, according to him, has been recognized by all nations. The Stagiritis believes that with Empedocles it is just that very kind of law, i.e. that the philosopher from Agrigento referred to that right when he was forbidding to kill living beings, since it is impossible for ones to do that justly and the others to do that unjustly (καὶ ὡς Ἐμπεδοκλῆς λέγει περὶ τοῦ μὴ κτείνειν τὸ ἔμψυχον: τοῦτο γὰρ οὐ τίσι μὲν δίκαιον τίσι δ' οὐ δίκαιον). Empedocles (and Pythagoras) claims (DK31B135) that for all living beings applies only one legal norm, and that those who had hurt a living creature shall receive punishments that cannot be redeemed. For more details consult Željko Kaluđerović, "Presocratics and Other Living Beings," *Philosophy of Education* 26, no. 1 (2020): 192-210.

the circle of right-holders leads to possible restrictions on the freedom of man, by a particular legal subject who, within the philosophical hierarchy of values, is placed below men.

For this reason, certain experts in legal science (Johannes Caspar) discuss the issue of moral acceptability of animal “rights” in a culture that so far has not considered animals as “moral subjects of comparison.”<sup>105</sup> In other words, it should be seen on the basis of which legal – bio-ethical reasons, a man allows to himself to be bound to the living beings that he has left behind in the history of the development of life.

In this context, Caspar speaks of the modern concept of human dignity, which includes responsibility and empathy for creatures. One who is capable of acting has brought animals into dependence on oneself and is therefore obliged to take care of their interests and the rights that arise from them. Man’s autonomy has a mutual relationship with responsibility for his conduct. Without this responsibility, there is no human dignity either. The greater the dependence of animals from the powerful-acting capable for self-determination man, the more actual becomes his responsibility.

Another element of human dignity, which, according to Caspar, recommends the denial of freedom in favour of animal “rights,” exists in the quantum of compassion towards the weak, without pursuing their motives. They establish the conditions and contents of personal responsibility and lead the inner motive to overcome the egoism of individual needs and instincts, through the limitations of belonging to the group and beyond the boundaries of one’s own species. Thus, they are the driving power of a type of ethics of solidarity, love for the neighbour, mercy, and that form of humanity that does not ask much for the price but works.

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<sup>105</sup> Johannes Caspar, *Tierschutz im Recht der modernen Industriegesellschaft* (Baden-Baden: Nomos Verlagsgesellschaft, 1999), 154.



As an intermediary result of the digression on the consent of the new so-called “animal ethics”<sup>106</sup> with ordinary anthropocentrism,<sup>107</sup> it is possible to postulate this:

- a. Animal “rights” at the expense of humans do not represent any contradiction to the symmetry of rights and duties in the usual bioethics. Nelson’s concept that any personal holder of interest can be a right holder whose interests should be treated the same as own interests, is a single systematic bridge between Singer’s and Regan’s views.
- b. There are bioethical reasons to give animals the “right” to a treatment that is appropriate to them, some would add to this the basic “right” to life, whereas in disputable cases man’s right to survive is more valuable.
- c. Restrictions on the action of man for the benefit of animals can rather be bioethically justified as a fulfilment of responsibility and compassion for the weak.<sup>108</sup>

<sup>106</sup> About the concept of ‘Animal ethics’ see *Encyclopedia of Environmental Ethics and Philosophy*, eds. John Baird Callicott and Robert Frodeman (Farmington Hills, MI: Macmillan Reference USA, 2009), 42-53; Dale Jamieson, *Ethics and Environment* (Cambridge: Cambridge University Press, 2008), 112-120.

<sup>107</sup> Aristotle’s paragraph from the *Politics* (1256b15-22) is emphasized as a paradigm of the leading western tradition and its unquestionable anthropocentrism: “In like manner we may infer that, after the birth of animals, plants exist for their sake, and that the other animals exist for the sake of man, the tame for use and food, the wild, if not all, at least the greater part of them, for food, and for the provision of clothing and various instruments. Now if nature makes nothing incomplete, and nothing in vain, the inference must be that she has made all animals for the sake of man” (ὥστε ὁμοίως δῆλον ὅτι καὶ γενομένοις οἰητέον τὰ τε φυτὰ τῶν ζώων ἕνεκεν εἶναι καὶ τὰ ἄλλα ζῶα τῶν ἀνθρώπων χάριν, τὰ μὲν ἡμερα καὶ διὰ τὴν χρῆσιν καὶ διὰ τὴν τροφήν, τῶν δ’ ἀγρίων, εἰ μὴ πάντα, ἀλλὰ τὰ γε πλεῖστα τῆς τροφῆς καὶ ἄλλης βοηθείας ἕνεκεν, ἵνα καὶ ἐσθῆς καὶ ἄλλα ὄργανα γίνηται ἐξ αὐτῶν. εἰ οὖν ἡ φύσις μηθὲν μῆτε ἀτελὲς ποιεῖ μῆτε μάτην, ἀναγκαῖον τῶν ἀνθρώπων ἕνεκεν αὐτὰ πάντα πεποιημέναι τὴν φύσιν). Aristotle, *Politics*, in *The Complete Works of Aristotle II*, ed. Jonathan Barnes, trans. Benjamin Jowett (Princeton, NJ: Princeton University Press, 1991), 1256b15-22, 1993-1994. Consult, for example Peter Singer, *Oslobođenje životinja* (Zagreb: Ibis grafika, 1998), 158.

<sup>108</sup> These examples and parts of comments have been taken and paraphrased from Kristijan Zajler, “Dostojanstvo životinja i zakoni ljudi,” *Sloboda za životinje* 1, (2006): 9-15.



The last fifty years on the European continent were marked by dramatic changes in the area of ethical-moral and legal-political regulation of the protection and welfare of animals.<sup>109</sup> They are the result of legislative activities of individual states<sup>110</sup> as well as of the transposition into the national legislation of a large number of relevant documents adopted under the auspices of the European Council and the various decisions of the bodies of the European Union, and of the standardizing of the legislations of European countries.<sup>111</sup>

During this period, at least seven conventions dedicated to the welfare of animals were adopted: the *European Convention for the Protection of Animals during International Transport* (1968);<sup>112</sup> the *European Convention for the Protection of Animals Kept for Farming Purposes* (1976);<sup>113</sup> the *European Convention for the Protection of Animals for Slaughter* (1979);<sup>114</sup> the *Convention on the Conservation of European Wildlife and Natural Habitats* (1979);<sup>115</sup> the *European Convention for the Protection of Vertebrate Animals Used for Experi-*

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<sup>109</sup> Animal welfare is usually, however estimated based on internationally accepted concept of the so-called “Five Freedoms”: 1.) Freedom from hunger and thirst: by ready access to fresh water and a diet to maintain full health and vigour, 2.) Freedom from discomfort: by providing an appropriate environment including shelter and a comfortable resting area, 3.) Freedom from pain, injury or disease: by prevention through rapid diagnosis and treatment, 4.) Freedom from fear and distress: by ensuring conditions and treatment which avoid mental suffering, and 5.) Freedom to express normal behaviour: by providing sufficient space, proper facilities and company of the animal’s own kind. [https://www.aspcapro.org/sites/default/files/ASPCA\\_5Freedoms\\_Vertical1\\_0.pdf](https://www.aspcapro.org/sites/default/files/ASPCA_5Freedoms_Vertical1_0.pdf).

<sup>110</sup> Germany is the first country in the European Union, which based on an amendment to its *Constitution* from 2002 provided the highest standards of legal protection of animals at the federal level. <https://www.theguardian.com/world/2002/may/18/animalwelfare.uk>.

<sup>111</sup> For more detailed consultations on the perspectives and achievements of bioethical institutionalization in the European Union see Iva Rinčić, *Europska bioetika: ideje i institucije* (Zagreb: Pergamena, 2011).

<sup>112</sup> *European Convention for the Protection of Animals during International Transport*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/065>.

<sup>113</sup> *European Convention for the Protection of Animals kept for Farming Purposes*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/087>.

<sup>114</sup> *European Convention for the Protection of Animals for Slaughter*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/102>.

<sup>115</sup> *Convention on the Conservation of European Wildlife and Natural Habitats*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104>.

*mental and other Scientific Purposes* (1986);<sup>116</sup> the *European Convention for the Protection of Pet Animals* (1987)<sup>117</sup> and the *Convention on the Protection of Environment through Criminal Law* (1998).<sup>118</sup> In the context of the treatment of animals, it is important to mention the *Protocol on Protection and Welfare of Animals* (1997), which recognises animals as sentient beings, and “the Community and the Member States shall pay full regard to the welfare requirements of animals.”<sup>119</sup>

Most of the adopted laws and regulations reflect the predominantly practical-ethical or bioethical<sup>120</sup> understanding of animals, i.e. the evolution of attitudes of legislators towards the environment, animal life as its integral part, and even towards animals as individual beings or creatures by themselves, their overall integrity and well-being. The meaning of such animal protection was, and still is anthropocentric, since in its centre are not animals as such, but different interests of man and society as a whole, such as the protection of human health, economic development and development of various economic branches, animal husbandry, hunting, fishing, protection of public morality, order and good practice and feelings of man towards animals<sup>121</sup> as well as the economic interests of animal owners.

The dominant anthropocentric image of the world, and the ensuing consequentialist relation of man to nature and animals, has been questioned over the last decades by the non-anthro-

<sup>116</sup> *European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/123>.

<sup>117</sup> *European Convention for the Protection of Pet Animals*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/125>.

<sup>118</sup> *Convention on the Protection of Environment through Criminal Law*, <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/172>.

<sup>119</sup> *Protocol on Protection and Welfare of Animals*, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12006E%2FPRO%2F33>.

<sup>120</sup> Consult Ivana Zagorac, *Bioetički senzibilitet* (Zagreb: Pergamena, 2018), 155-167.

<sup>121</sup> About what an animal is to man and what is man to animal see Nikola Visković, *Kulturna zoologija* (Zagreb: Jesenski i Turk, 2009).

pocentric expansion of ethics, and by ever louder posing of bioethical demands for a fundamental and new settlement of relations between humans and other living beings.<sup>122</sup> Attempts are being made to establish a new relationship by relativizing the differences between man and non-human living beings,<sup>123</sup> i.e. by attributing specifically human qualities and categories, such as dignity, rights and moral status, to animals, but also, especially in regards to plants, of the ability of sight, feeling, memory, communication, consciousness and thinking.<sup>124</sup>

The question may be raised as to how this, by non-anthropocentrists increasingly bioethically required “dignity” of animals, and the resulting animal “rights” are regulated, and whether they are aligned with the consideration of the “moral status” of animals. According to the *Law on Animal Welfare of the Republic of Serbia*,<sup>125</sup> Article 4, the basic principles of the protection of animal welfare are based on the so-called pathocentric concept, since it focuses on the “universality of pain,” and Article 2 states that the welfare of animals, that is regulated by this law, states:

Animals that can sense pain, suffering, fear and stress.<sup>126</sup>

<sup>122</sup> Consult also Jeff McMahan, *The Ethics of Killing* (Oxford: Oxford University Press, 2002), 194-203.

<sup>123</sup> See Stavros Karageorgakis and Konstantina Lyrou, “The Essence of Nature and Dialectical Naturalism,” *Conatus – Journal of Philosophy* 8, no. 1 (2023): 185-200.

<sup>124</sup> More elaborately on these and similar dilemmas see the book of the prominent biologist Daniel Chamovitz, *What a Plant Knows, A Field Guide to the Senses* (New York: Scientific American / Farrar, Straus and Giroux, 2017).

<sup>125</sup> The *Law on Animal Welfare of the Republic of Serbia* was posted on the website of the Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia on January 19, 2009, and became effective on June 10, 2009. See the *Law on Animal Welfare of the Republic of Serbia*, [http://www.paragraf.rs/propisi/zakon\\_o\\_dobrobiti\\_zivotinja.html](http://www.paragraf.rs/propisi/zakon_o_dobrobiti_zivotinja.html). However, the idea of a human relationship to animals and their protection was regulated in Serbia in 1850 i.e. 1860. Consult Ana Batrićević, *Krivičnopravna zaštita životinja*, [http://www.prafak.ni.ac.rs/files/disertacije/Ana\\_Batricevic\\_Krivicnopravna\\_zastita\\_zivotinja\\_2012.pdf](http://www.prafak.ni.ac.rs/files/disertacije/Ana_Batricevic_Krivicnopravna_zastita_zivotinja_2012.pdf), 66-75.

<sup>126</sup> *Law on Animal Welfare of the Republic of Serbia*, trans. Željko Kaluđerović, [http://www.paragraf.rs/propisi/zakon\\_o\\_dobrobiti\\_zivotinja.html](http://www.paragraf.rs/propisi/zakon_o_dobrobiti_zivotinja.html). Besides the pain, suffering, fear and stress, it is commonly added that animals can feel panic as well.

When the second point of Article 4 of the *Law on Animal Welfare* stipulates that the principle of caring for animals:

implies a moral obligation and the duty of man to respect the animals and take care of the life and welfare of animals,<sup>127</sup>

it only shows that man ought to protect animals, and it does not entitle the animals to the “right” to that protection. This, therefore, refers to the moral duty of man, and not to the “right” of the animals.<sup>128</sup> The rights holder can only be a man, because he alone has the dignity of personality, which is an attitude that is in accordance with the customary anthropocentric theses, and it does not differ much from the majority of similar norms in other European countries.<sup>129</sup>

Article 7, paragraph 1, of the *Law on Animal Welfare*, states that it is forbidden “to abuse animals,”<sup>130</sup> while in paragraph 3 of the same Article, it is prohibited to:

Deprive an animal of life, except in cases and in the manner prescribed by this Law.<sup>131</sup>

<sup>127</sup> Ibid.

<sup>128</sup> See Evangelos D. Protopapadakis, “Animal Rights, or Just Human Wrongs?” in *Animal Ethics: Past and Present Perspectives*, ed. Evangelos D. Protopapadakis, 279-291 (Berlin: Logos Verlag, 2012).

<sup>129</sup> For example, the *Law on Animal Protection of the Republic of Croatia* [Zakon o zaštiti životinja Republike Hrvatske], <https://www.zakon.hr/z/257/Zakon-o-za%C5%A1titi-%C5%BEivotinja>), the *Law on Animal Protection and Welfare of Bosnia and Herzegovina* [Zakon o zaštiti i dobrobiti životinja Bosne i Hercegovine], <https://www.paragraf.ba/propisi/bih/zakon-o-zastiti-i-dobrobiti-zivotinja.html>, or the *Law on Animal Protection and Welfare of Montenegro* [Zakon o zaštiti dobrobiti životinja Crne Gore], <https://epa.org.me/wp-content/uploads/2017/12/zakon-o-zastiti-dobrobiti-zivotinja.pdf>.

<sup>130</sup> Article 1 of the *Law on Animal Welfare* states: “This law regulates the welfare of animals, rights, obligations and responsibilities of legal and physical persons, i.e. entrepreneurs, for the welfare of animals, treatment of animals and protection of animals against abuse.” *Law on Animal Welfare of the Republic of Serbia*, trans. Željko Kaluđerović, [http://www.paragraf.rs/propisi/zakon\\_o\\_dobrobiti\\_zivotinja.html](http://www.paragraf.rs/propisi/zakon_o_dobrobiti_zivotinja.html).

<sup>131</sup> Ibid.

Such argumentation is substantially getting closer to the recognition of the “dignity” of animals. Of course, the trouble with such regulations is that an animal is not a legal subject pursuant to the laws of the state, and therefore it cannot even sue anyone, despite the law on their welfare being adopted in the National Assembly. Lawsuits cannot be filed on behalf of injured parties that are pigs or hens, since they are animals, and animals cannot participate in any court proceedings.<sup>132</sup>

Article 6, paragraph 1 of the *Law on Animal Welfare* states that the owner or holder of the animal is obliged to:

Treat the animal with the care of a prudent owner and to provide conditions for keeping and care of animals that correspond to the species, breed, sex, age, as well as physical, biological and production specifics and characteristics of the behaviour and health of the animal; ... The owner or keeper of the animal is responsible<sup>133</sup> for the life, health and welfare of the animal and must take all necessary measures to ensure that no unnecessary pain, suffering, fear and stress or injury is inflicted on the animals.<sup>134</sup>

<sup>132</sup> Consult, for instance [https://www.washingtonpost.com/archive/politics/1988/08/07/european-seal-herd-perishing/232cffdb-9d38-4fee-b710-bf371965ad06/?noredirect=on&utm\\_term=.9408f6d6c3f6](https://www.washingtonpost.com/archive/politics/1988/08/07/european-seal-herd-perishing/232cffdb-9d38-4fee-b710-bf371965ad06/?noredirect=on&utm_term=.9408f6d6c3f6); <https://www.cbsnews.com/news/chronology-of-mad-cow-crisis/>.

<sup>133</sup> Ante Čović believes that most of the discussions about the responsibility of man for non-human living beings occur within the so-called ethics of animals, whose task is to determine the “moral status of animals,” and in the framework of advocacy for “animal rights.” He adds that in this context, the “absurd method of speciesistic levelling” has been established, which appears in two of its forms: “As the Aesopian approach of ‘levelling in ascending order,’ which consists in anthropomorphic adherence to non-human living beings specifically of human qualities and categories, such as dignity, moral status, rights, etc., and as a Singer’s approach of ‘levelling in descending order,’ which consists in zoomorphic reduction of specifically human characteristics and categories. Both methods have the same goal – to level differences between man and other living beings with the ability to sense based on the wrong assumption that this is a good way to develop moral considerations and legal obligations towards non-human members of the sensitive community.” See Ante Čović, “Biotička zajednica kao temelj odgovornosti za ne-ljudska živa bića,” in *Od nove medicinska etike do integrativne bioetike*, ur. Ante Čović, Nada Gosić, and Luka Tomašević, trans. Željko Kaluđerović (Zagreb: Pergamena, 2009), 37.

<sup>134</sup> *Law on Animal Welfare of the Republic of Serbia*, trans. Željko Kaluđerović, [http://www.paragraf.rs/propisi/zakon\\_o\\_dobrobiti\\_zivotinja.html](http://www.paragraf.rs/propisi/zakon_o_dobrobiti_zivotinja.html).

Despite this very well-conceived and harmonized with the highest European standards text, the life of animals in the stays or their position during transport is still quite poor. The answer to why this is so partly lies in the fact that there is no concretization of general legal norms of such laws in the legislation, and partly because the adopted regulations limit the minimum standards that are not consistent with the high goals that are postulated by such laws.

Although the *Law on Animal Welfare* is “a matter of general interest,” because the need for it is imposed by the process of integration of the Republic of Serbia into the European Union and harmonization of the regulations with the EU directives, in itself, it does not prohibit any injury or damage to animal health but only prohibits:

Stunning, or depriving the animal of life contrary to the provisions of this Law.<sup>135</sup>

After all, Article 15 of the *Law on Animal Welfare* sets out the nine bases on which an animal may be deprived of life “in a humane manner.” These include points 3 and 4, according to which an animal can be slaughtered if it is to be used for food, and if it is used for scientific and biomedical purposes.<sup>136</sup> In the collision of

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<sup>135</sup> Ibid.

<sup>136</sup> Except in the *Law on Animal Welfare of the Republic of Serbia*, experiments with experimental animals are also regulated in the various rulebooks, such as the *Rulebook for Working with Experimental Animals at the University of Novi Sad* [Pravilnik za rad sa ogleđnim životinjama Univerziteta u Novom Sadu]. This *Rulebook* defines: “Protected animal species, experimental procedures (ethical and non-ethical), principles of ethics of experimental work on animals, the competence of researchers for such work, composition and manner of establishment of the Ethics Committee for the protection of the welfare of experimental animals at the University of Novi Sad as well as the scope of work, tasks and rules of work of the committee (hereinafter: the Ethics Committee), the procedure for obtaining an opinion on experimental work on animals by the Ethics Committee, as well as the procedure in case of non-compliance with the rules of operation of the Eth-



rights, traders of cattle and scientific institutions are favoured, since they can rely on their basic rights to freely exercise their own profession, as well as to the freedom of scientific research, namely to the rights guaranteed to them by the highest legal act of the state, the Constitution, while the *Law on Animal Welfare* is an act of a lower ontological rank, that is, a derived act.

If there is any sincere intention to take care of the protection of animals, it is certainly not enough to devote to them one state goal that protects them so to say indirectly; instead, according to non-anthropocentrists, they should be given the “rights” that are similar to basic rights, to which a lawyer could refer to on their behalf when filing a lawsuit, and which can directly compete with the basic rights of scientists, meat producers and those who carry out the transport of animals. How could these basic “rights” of animals look like?

Firstly, they should be granted the “right” of respect for their animal “dignity,” “the right” that will protect them from abuse in experiments.<sup>137</sup> The conflict between monkeys, dogs and cats harassed in experimental laboratories,<sup>138</sup> on the one hand, and the interests of medicine, the pharmaceutical indus-

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ics Committee and decisions made pursuant to the Rulebook.” *Rulebook for working with experimental animals at the University of Novi Sad*, trans. Željko Kaluđerović, <https://www.uns.ac.rs/index.php/univerzitet/javnost-rada-2/dokumenti/aktiuns/send/35-pravilnici/141-pravilnik-za-rad-sa-oglednim-zivotinjama-2>.

<sup>137</sup> On scientific experiments on animals consult Michele Aramini, *Uvod u bioetiku* (Zagreb: Kršćanska sadašnjost, 2009), 403-405; Raymond G. Frey, “Animals and Their Medical Use,” in *Contemporary Debates in Applied Ethics*, eds. Andrew I. Cohen and Christopher H. Wellman, 91-103 (Oxford: Blackwell Publishing, 2005).

<sup>138</sup> At the universities in Great Britain, only, around 1,300,000 animals were killed in 2012 for research purposes. A little less than one million killed animals were mice, and among other animals there were fish, rats, frogs, birds, hens, reptiles, as well as 124 monkeys, 10 dogs, 2 cats and 6 emus: <https://www.dailymail.co.uk/news/article-2503359/British-universities-killed-1-3m-animals-research-year-including-million-mice-10-dogs-emus.html>. On the occasion of the “World Day for Animals in Laboratories” (WDAIL) of the associations Fenix, Hope for animals - Riska and Link Plus informed the public that every year around 150 million animals are killed in various experiments in the world: <https://www.telegraf.rs/vesti/1537818-jezivo-150-miliona-zivotinja-strada-svake-godine-zbog-surovih-eksperimenta-uznemirujuci-video>.

try, and researchers on the other hand, could induce people to finally seriously assess whether animal suffering<sup>139</sup> is in a proper relationship to the benefit for man that comes out of it.<sup>140</sup> In this assessment, it will be also significant whether the dignity of man justifies depriving other living beings of their “dignity” on purpose of carrying out experiments<sup>141</sup> on them, whose expediency is questionable at least in some situations.

Animals should, furthermore, be guaranteed the basic “right” to life<sup>142</sup> appropriate to their species, the view that is based on the parts of the fourth and fifth articles of the *Universal Declaration of Animal Rights*:

Wild animals have the right to live and reproduce in freedom their own natural environment ... Any animal which is dependent on man has the right to proper sustenance and care.<sup>143</sup>

This also applies to the fundamental “right” of animals to life. As long as modern societies are, for various reasons, meat-eat-

<sup>139</sup> See: [https://www.worldanimalprotection.org/take-action/join-us-to-end-animal-cruelty?gclid=EAIaIQobChMI5YOfmdOb8AIVV-R3Ch2AQAGsEAAYASAAEgKN-HPD\\_BwE](https://www.worldanimalprotection.org/take-action/join-us-to-end-animal-cruelty?gclid=EAIaIQobChMI5YOfmdOb8AIVV-R3Ch2AQAGsEAAYASAAEgKN-HPD_BwE).

<sup>140</sup> Article 6 of the *Universal Declaration of Animal Rights* states: “Experiments on animals entailing physical or psychological suffering violate the rights of animals. 2°-Replacement methods must be developed and systematically implemented.” *Universal Declaration of Animal Rights*, <https://constitutii.files.wordpress.com/2016/06/file-id-607.pdf>.

<sup>141</sup> Some philosophers (Clement of Alexandria, Moses Maimonides, Tomas Aquinas, Kant and some contemporary authors) as an argument why animals should not be experimented with, stated the subsequent potential dehumanization of man himself. Similarly in the words of Fritz Jahr: “... Senseless cruelty towards animals is an indication of an unrefined character becoming dangerous towards the human environment as well.” Consult Fritz Jahr, “Animal Protection and Ethics,” in *Fritz Jahr and the Foundations of Global Bioethics. The Future of Integrative Bioethics*, eds. Amir Muzur and Hans-Martin Sass (Berlin, Münster, Wien, Zürich, London: Lit Verlag, 2012), 10.

<sup>142</sup> Ivan Cifrić writes in detail about the right of animal species to life, different theoretical approaches, as well as the results of the research of the respondents on this subject. Ivan Cifrić, *Bioetička ekumena* (Zagreb: Pergamena, 2007), 209-232.

<sup>143</sup> *Universal Declaration of Animal Rights*, <https://constitutii.files.wordpress.com/2016/06/file-id-607.pdf>.



ing societies, it will be possible only to gradually implement this basic “right” of animals and therefore anchor it only in the vicinity of closer legal regulations. This basic “right” would primarily prohibit the excessive production of animals for slaughter, which then also leads to their destruction. Then, to gradually achieve the protection of life for the benefit of animals, different programming of eating habits of new generations of people would have to occur.<sup>144</sup>

In guaranteeing the basic “rights” to animals, which, in addition to determining the state’s goal, should also enter the Constitution,<sup>145</sup> all of this could be taken into consideration together with the statement that any vertebrate has the right to have its dignity respected, and to a life that is suitable to its species. According to this interpretation, man would be permitted to intervene only for reasons of public interest, certainly within the framework of the law.<sup>146</sup> The first of these two sentences, in which in the form of a basic ‘right’ animals are granted the “right” to ‘dignity’ and life appropriate to the species, would

<sup>144</sup> The facts that vegetarianism and veganism are not types of diet that have appeared in modern times, but that they have roots in ancient Greece are well illustrated by examples from the Presocratic era. Pythagoras’ and Empedocles’ followers, for example, indicate that men are kin not only to each other or with the gods, but with living beings which do not have the gift of speech. Something common that connects them all is a breath (πνεῦμα), as a kind of soul (ψυχή), which extends throughout the entire *cosmos* and unites men with all of them. Therefore, if man would be killing or eating their flesh, they would commit injustice and sin towards deities (ἀσεβήσομεν) to the same extent as if they destroyed their relatives (συγγενεῖς). For that reason the “Italian” philosophers advised man to abstain from ensouled (living) beings (ἐμψύχων) arguing that it is a sacrilege (ἀσεβεῖν) committed by “those who drench altars with warm blood of the blessed” (βωμῶν ἐρεῦθοντας μακάρων θερμοῖσι φόνοισιν) (DK31B136). See also Gary Steiner, *Anthropocentrism and Its Discontents: The Moral Status of Animals in the History of Western Philosophy* (Pittsburgh: University of Pittsburgh Press, 2005); Consult Daniel A. Dombrowski, *The Philosophy of Vegetarianism* (Amherst, MA: The University of Massachusetts Press, 1984).

<sup>145</sup> On the basis of the 1992 plebiscite, in Switzerland, the *Constitution* guarantees the inherent value of animals, i.e. it already speaks of “dignity of Creature” (die Würde der Kreatur). Consult as well the latest version of the *Federal Constitution of the Swiss Confederation*, Article 120, §2 (Non-human gene technology), <https://www.fedlex.admin.ch/eli/cc/1999/404/en#a120>.

<sup>146</sup> In an attempt to make this proposal be legally and dogmatically viable and practical for implementation, it would be necessary to implement a specific and serious research.

probably mean that the keeping of animals in massive farming, which is being practised today, due to the Constitution would have to, at some point be abolished and replaced by keeping animals in the manner appropriate to their species. The second sentence, according to which man is permitted to interfere in the life of animals for reasons of public interest, would be a regulation between the absolute protection of the life of animals and the relative readiness of a society which to some degree tortures animals, to take care of this protection of life. Movement of the society in that direction should represent the intention of the state which is to protect the animals, which is connected with the continuous flow of smaller and larger steps of the legislator, who will take care of that state's goal by promoting the appropriate way of life.

All this can seem utopian, but time will show if people are mature enough for such a step in evolution. The present ecological – and not only ecological – crisis urges mankind to, among other things, determine in a new way its attitude towards animals. Homo sapiens is the first species that has ever been able to freely decide whether they will give up eating other living beings. The first step has been made – people have ceased to eat each other for a long time, and cannibalism is barely present in the so-called “primitive” tribes. Will man soon make a second step by stopping eating animals, to respect the fundamental “right” animal to life?<sup>147</sup> It is highly unlikely that this will happen in the foreseeable future, but this does not mean that we should not continue to work on strengthening their protection and welfare.

A reasonable care for the protection and welfare of animals, finally, does not mean that the author of this book believes that they should be entitled to a kind of “moral status,” which would conform with human moral phenomenon. He, more-

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<sup>147</sup> Joan Dunayer claims that people deny the right to life, liberty, and other fundamental rights to non-human living beings for only one reason which is speciesism. Joan Dunayer, *Speciesism* (Zagreb, Čakovec: Institut za etnologiju i folkloristiku Zagreb, D. D. Čakovec, 2009), 202.

over, follows the traditional ethical view that moral status can belong only to man since he is the only natural being who can act morally. After all, taking care of the “dignity” and all present and future “rights” and status of animals is man’s task.<sup>148</sup>

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<sup>148</sup> See Peter Carruthers, “The Animals Issue,” in *Today’s Moral Issues*, ed. Daniel Bonevac (Boston: McGraw Hill, 2002), 101-106.



## V. Genetically Modified Crops: Great Hope or Great Deception

Biotechnology, molecular genetics, genetic engineering, transgenes or genetically modified organisms (GMOs), represent methods, technologies and products that not only were shaking the scientific circles at the end of the previous century, and certainly will not remain an exclusive topic for narrow academic circles in the new millennium, but they will also become a subject of approval or rejoice for laymen.

At the very beginning, it is necessary to clarify the actual meaning of the key phrase of genetically modified organisms. Genetic modification, in its broadest sense, implies any alteration in genes, potentially by recombination of inherited parent genes, and is obtained by the combination of parent organisms and hybridization during the process of breeding and selection of organisms. Genome changes can be also changes in the number of chromosomes, or larger changes in genetic makeup, obtained by cytogenetics techniques. Genetic modification, in the narrow sense, can occur at a gene level, or at the level of a smaller group of genes, by techniques of molecular genetics, i.e. genetic engineering. All organisms obtained in the above-mentioned ways can be considered genetically modified.<sup>149</sup>

So, by genetically modified organisms we mean organisms whose genetic makeup has been altered in ways not possible through traditional reproduction or through natural recombination of existing genes of the species. In other words, these genetically modified or transgenic organisms have had their genetic makeup modified in the way that could never have happened in nature.<sup>150</sup> Gene constructions by which the host genome is

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<sup>149</sup> On the 25<sup>th</sup> of July 2018, the Court of Justice of the European Union ruled that: “Organisms obtained by mutagenesis are GMOs and are, in principle, subject to the obligations laid down by the GMO Directive.” <https://curia.europa.eu/jcms/upload/docs/application/pdf/2018-07/cp180111en.pdf>.

<sup>150</sup> Consult Article 4 (§§ 1, 2 and 5) of the *Law on Genetically Modified Organisms of the Repub-*

modified most frequently originate from totally unrelated species, and thus the limits in the natural gene flow of changes of genetic information are either eliminated or moved.<sup>151</sup> DNAs of genetically modified organisms contain genes introduced from a different species or genes introduced by laboratory methods and techniques. Genetic material introduced into the DNA of the host cell can be taken from plants, microorganisms, insects and animals, including humans, while so-called synthetic genes have been also mentioned recently.<sup>152</sup>

Almost until the mid-20<sup>th</sup> century, the production of most crops was dominated by local populations, i.e. cultivars characteristic for specific growing regions, well adapted to local conditions. These varieties did not require large production investments and generated, for the time being, sufficient yield and quality levels in agricultural regions. Demand for higher yields and the logic of capital led to the gradual retreat of these populations in favour of more intensive hybrids. Although the replacement of local populations in production by more intensively bred crops began in the early 20<sup>th</sup> century, full intensification of agriculture production did not gain momentum until 1940. The end of the 1950s and early 1960s were marked by the so-called “Green Revolution,”<sup>153</sup> which by shortening the wheat stems changed the ratio of vegetative and generative parts of the plant in favour of the latter one, thus facilitating a significant increase in production primarily of wheat and rice.

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*lic of Serbia* [Zakon o genetički modifikovanim organizmima Republike Srbije], [https://www.paragraf.rs/propisi/zakon\\_o\\_geneticki\\_modifikovanim\\_organizmima.html](https://www.paragraf.rs/propisi/zakon_o_geneticki_modifikovanim_organizmima.html).

<sup>151</sup> Over 3,000 plants, animals and microorganisms have been developed in this way, mostly in laboratories in the USA. However, only a little over 40 species of GM plant culture have been approved for marketing and a relatively small number of projects have been completely commercialized (soybean, cotton, maize, canola, sugar beets, alfalfa, papaya, squash, eggplant, potato, apple, pineapple, poplar).

<sup>152</sup> See Kaare M. Nielsen, “Transgenic Organisms – Time for Conceptual Diversification,” *Nature* 21, no. 3 (2003): 227-228.

<sup>153</sup> The central figure of the “Green Revolution” is the American scientist Norman E. Borlaug, Nobel Peace Prize laureate for 1970. Consult Ivica Kelam, *Genetički modifikirani usjevi kao bioetički problem* (Zagreb/Osijek: Pergamena, 2015), 191-194.

To introduce new varieties and hybrids of crops several international scientific and research centres have been opened for the studying of different agrarian systems. These centres are located in Mexico (for corn, and wheat), the Philippines (rice), Columbia (tropical food crops), Nigeria (tropical food crops in humid and subhumid tropical regions), Ivory Coast (for rice production in West Africa), Peru (potato), India (food crops of dry tropical regions)... Owing to the centre in Mexico, for example, wheat yields have tripled and this country has become the founder of the "Green Revolution." Similar results have been achieved in Pakistan and India, while the Philippines International Rice Research Institute has achieved significant success by introducing high-yield rice varieties. These varieties, named Philippine varieties, not only provide high yields but also grow significantly faster enabling for 3-4 harvests per year, and therefore they have spread in all countries of Southeast Asia.

Irrigation procedure, in addition to new varieties and hybrids is also important since new grain varieties could realize their potential only in areas with favourable humidity conditions. Therefore, while the "Green Revolution" was started in many countries, mostly in Asia, more attention began to be paid to the irrigation of crops.

The third component of the "Green Revolution" success is related to the application of contemporary agricultural engineering, synthetic fertilizers, pesticides, etc. Nitrogen fertilizers are particularly important because new Mexican wheat varieties, for example, require even three times more nitrogen fertilizers per hectare than usual varieties (130:45 kg/ha).

Positive effects of the "Green Revolution" in some developing countries were evident. They led to increased food production, thus somewhat mitigating the issue of hunger in the world. According to some data, during the 1960s the "Green Revolution" helped save hundreds of millions of people from

hunger, mainly in Asia and Latin America.<sup>154</sup> In addition to the increase of grain yield, its consumption per capita was also increased. India, Pakistan, Thailand, Indonesia, China and some other countries reduced or stopped importing grain and thus became self-sufficient in this respect.

The last forty or so years of the 20<sup>th</sup> century in which the “Green Revolution” was implemented have also brought about a series of negative effects. First, it has to be said that the positive effects of the “Green Revolution” are mainly visible in Asia and Latin America, whereas in Africa, for example, the spread of new wheat and rice high-yielding varieties constitutes only ~ 2%. It is a fact that at the beginning of the 21<sup>st</sup> century, people living in the countries of Sub-Saharan Africa are still dying of hunger and that the availability of food per capita in this region, since 1990 until the present, has decreased by at least 3%. The issue of world hunger is certainly not caused by mere technical scarcity of food, which we have in surplus and which is even being destroyed to retain favourable prices at the market, but by much more complex social and political reasons which are still today holding back the availability of food to the poor, and thus makes them even poorer than they used to be at the beginning of the “Revolution.”

Second, growing intensive varieties and hybrids in large areas led to the disappearance of many local and indigenous, “wild” populations, resulting in the erosion of genetic diversity, i.e. reduction of biodiversity.<sup>155</sup> Third, irrigation and inten-

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<sup>154</sup> See <https://oregonstate.edu/instruct/css/330/three/Green.pdf>.

<sup>155</sup> The Food and Agriculture Organization of the United Nations (FAO) estimates that: “About three-quarters of the genetic diversity found in agricultural crops have been lost over the last century.” <http://www.fao.org/newsroom/en/news/2004/42621/index.html#:~:text=FAO%20estimates%20that%20about%20three,cause%20for%20concern%2C%20FAO%20said>. Biological diversity, or abbreviatedly biodiversity, implies variety, i.e. the variability of plants, animals and other living organisms in a certain area. In other words, we are talking about the variety of species in a particular ecosystem. Biodiversity is a complex notion comprising not only variability, but also mutual influences (interaction) of organisms, both mutually and with the environment they live in, so it is



sive cultivation led to significant erosion of arable land and soil degradation. In the fourth place, agriculture has become highly dependent on fuel products, primarily oil. In the fifth place, agricultural production has also become dependent on the use of chemical substances (pesticides and fertilizers). In addition to the increase in production costs, this resulted in the pollution of soil, water and the overall environment. Six, more intensive agricultural production led the most developed countries to a better geopolitical and economic situation, and they were able to organize and finance plant breeding programs, as well as intensive agricultural production and to market seeding material and agricultural products globally.<sup>156</sup> In the seventh place, production in monoculture led to a greater frequency of weeds, diseases and pests. The problem of such “factory” agricultural production in monoculture was particularly obvious in the US, i.e. in the countries which used to organize such production in large areas, as is the case of the American Midwest (so-called Corn Belt).<sup>157</sup>

A resolution for the problem brought about by monoculture and by constrained variability of breeds and hybrids was sought after in GMOs, which are more distantly related to their indigenous “relatives” than their bred, selected and intensive predecessors obtained by classical hybridization used to be. In what way is this increased distance reflected? It is generally known that plants in natural populations, wild relatives, are

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not easy to define it unambiguously. Consult <https://actionaid.org/search?s=Biodiversity>. See as well Holmes Rolston III, “What Do We Mean by Intrinsic Value and Integrity of Plants and Animals?” in *Genetic Engineering and the Integrity of Animals and Plants*, eds. David Heaf and Johannes Wirz (Dornach: Ifgene, 2002), 10. Also, on the Stoic roots of these notions, see Evangelos D. Protopapadakis, “The Stoic Notion of Cosmic Sympathy in Contemporary Environmental Ethics,” in *Antiquity, Modern World and Reception of Ancient Culture*, 290-305 (Belgrade: The Serbian Society for Ancient Studies, 2012).

<sup>156</sup> For more details about globalization consult the last chapter of this book “VII. Globalization: Integration or Recolonization of the World.”

<sup>157</sup> “Corn Belt,” area in the United States of America, approximately covering western Indiana, Illinois, Iowa, Missouri, eastern Nebraska, and eastern Kansas, in which corn and soybeans are the dominant crops.

highly adaptable. This adaptability is reflected so that, when all conditions are unfavourable, they will reproduce minimally, merely to propagate the species. The more favourable the conditions, the greater the scale of reproduction there will be, though it will never turn into a super production. The imperative of modern agricultural production is exactly to “demand” plants to produce as much as possible, as stable as possible, almost regardless of environmental conditions. Such a “request” has led to increased human intervention in agricultural production and to lead to further and further modifications of plant genomes.

Classical breeding (crossing of parents of the same variety or closely related and selection of offspring) was not a sufficiently efficient method anymore to offer a satisfactory solution, so the technology of creating transgenic organisms entered the scene. The legitimacy of the new technology is once again being attempted by mentioning the old problem: “resolving the issue of world hunger,” while what was going on backstage was a much more prosaic struggle of highly developed countries to gain a monopoly in all segments of plant production, as well as large multinational companies running after maximum profit rates.<sup>158</sup>

How do relevant data on GMOs, or as they are more and more often euphemistically called biotech crops look like?<sup>159</sup> Summarily, the total area in the world used for the growing of GMOs, in the period from 1996 to 2019, amounts to somewhat 2.7 billion hectares. Areas from 2019 of 190.4 mil. ha under GMO represents an increase of about 112 times in comparison

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<sup>158</sup> Most frequent transgenic plant species in production are those whose genome was modified by inserting gene constructions for broad range herbicide resistance, i.e. total herbicides. Indicatively, as a rule, these are specific herbicides produced and patented by the same company which had produced and patented related transgenic crop, along with gene construction.

<sup>159</sup> Data further below have been taken from “Global Status of Commercialized Biotech/GM Crops,” *ISAAA Brief* No. 55, 2019: <https://www.isaaa.org/resources/publications/briefs/55/executivesummary/default.asp>.

to the initial 1.7 mil. ha in 1996 and shows that the “Greene Revolution” undoubtedly represents the fastest adopted biotechnology in modern history.

Today GMO is grown in 29 countries on all continents,<sup>160</sup> which represents a significant change in comparison to the initial stage. Namely, in 1996 GMOs were grown in only 6 countries, primarily in the USA, Canada, Australia and Argentina, with the majority share (1.45 million hectares out of a total of 1.7 mil. ha) being grown in USA. Although, still today, about 37.5% of the total area under GMO is in the USA, and 88.1% out of all areas in the world are in the American continent, there is a tendency for the spreading of areas under transgenic plants. Analysts are particularly pointing out the expansion of GMO growing in India, China and South Africa. Indeed, areas under GMO in these countries are rapidly increasing mostly in India where areas under Bt cotton seeds starting from less than 50.000 ha in 2002 rose to 11.9 million ha in 2019. In China areas under GMO have been increased from a modest 34.000 ha in 1997 to 3.2 million ha in 2019. South Africa has risen from negligible areas in 1998 to the 8th place in the world with 2.7 million ha under GMO.

EU market does not accept food with GM ingredients. The culmination was reached in 1999 when the EU introduced a moratorium on transgenic crops, also implying a ban on importing all transgenic products from the USA to the EU. This was reflected in sowing plans of American farmers in 2000, who became additionally concerned due to the requirements for GM food to be specifically marked, as well as by the obligation of traceability i.e. documented tracking of a certain prod-

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<sup>160</sup> Sorted by the size of areas under GMO, these are the following countries: USA, Brazil, Argentina, Canada, India, Paraguay, China, South Africa, Pakistan, Bolivia, Uruguay, Philippines, Australia, Myanmar, Sudan, Mexico, Spain, Colombia, Vietnam, Honduras, Chile, Malawi, Portugal, Indonesia, Bangladesh, Nigeria, Eswatini, Ethiopia, Costa Rica. A total of 72 countries adopted *biotech* crops – 29 countries planted, and 43 additional countries imported.

uct along the entire production chain. This is certainly one of the reasons why the year 2000 was a year of decelerated growth in the growing of GM crops. The introduction of 17 new transgenic corn varieties (modified by 'MON 810' transgene) to the common variety sort of EU at the end of 2004 by some authors subsequently was interpreted as de facto lifting of the existing moratorium.<sup>161</sup> The report for 2019 shows that GMOs are grown only in 2 EU countries, out of the total of 27 countries that belong to this organization. Spain is the leading country under GMO (107.130 hectares), and it is the only European so-called biotech mega-state.<sup>162</sup> Portugal grows Bt corn in small areas (4.753 hectares) (The total area under GMO in the EU in 2019 amounted to 111.883 hectares, in other words, in the Union two years ago, GM crops were grown on only 0.07% of all areas under them in the world). Although areas under GMO in Europe are proportionally small, in recent years there is a tendency to proclaim regions where transgenic plants will not be grown, i.e. so-called "non-transgenic zones."<sup>163</sup> In some of the EU countries, GM-free region networks are declared, and many European cities are adopting declarations on GMO-free status.<sup>164</sup>

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<sup>161</sup> EU faces an additional problem of the banning of GMO cultivation in its territory after it lost the WTO dispute brought by the USA, Argentina and Canada against it. New troubles arose in 2017 with the ratification and, by some EU member states, the signing of a controversial trade agreement between Canada and the EU, better known as CETA, which allows unlabelled Canadian genetically modified agricultural products to appear on the European market. The International Conference "Bioethics and the Environment - Does CETA Open the Door for GMOs?" [Bioetika i okoliš - otvara li CETA vrata za GMO?], which was held as part of the 1<sup>st</sup> *Osijek Days of Bioethics* in Osijek, Croatia, from 7 to 8 November 2017, was dedicated to this topic.

<sup>162</sup> That is, a country that produces GM crops on an area of more than 50.000 hectares.

<sup>163</sup> Members of the European Parliament adopted a law in early 2015 that allows EU member states to restrict or completely ban the cultivation of genetically modified organisms (GMOs) on their territory. The ban can be introduced after the assessment that the natural environment could be endangered in the country, unlike the previous obligation to prove that such crops pose a danger to human or animal health.

<sup>164</sup> In Serbia, about 136 municipalities and towns (out of a total of 169 local self-governments) adopted the Declaration on GMOs, together with the Declaration of the Greens, which begins with the following words: "We do not want GMOs on our territory!" See

Researchers tend to point out the fact that in 2019 the number of developing countries (24) growing GMO was almost five times larger than the number of industrially developed countries (5). It is also a fact that more than half of the total world population lives in the 29 countries where GMOs are grown. Nevertheless, we should not forget that GMOs, with 190.4 million hectares proportion, cover only about 12.7% of the total world area under different plant species.

Among transgenic crops which in 2019 were the most cultivated ones, there are soybean, cotton, maize and canola. GM soybean covers 74% (or 91.9 mil. ha) out of the total area under this crop in the world (124.2 mil. ha). Here we should also add that GM soybean covers about half (48.2%) of the total area under all GM crops. GM cotton covers 79% (25.7 mil. ha) out of total cultivated areas under these crops (32.6 mil. ha), at the same time covering 13.5% of areas under all GM plants. GM maize, which is increasingly grown in this way, covers 31% (60.9 mil. ha) out of the total area under this crop in the world (196.5 mil. ha), and 32% of all GM plants. GM canola is grown at 27% (10.1 mil. ha) of all areas under this crop (37.4 mil. ha), thus representing 5.3% of total areas under GM plants.

Since the beginning of commercial growing of GMOs until 2018 resistance to herbicides has been the leading genetic modification.<sup>165</sup> Areas under such modified crops have increased,

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<http://prviprvinaskali.com/clanci/gmo/gradoviopstine/gradovi-i-opstine-srbije-protiv-gmo.html>.

<sup>165</sup> Herbicide tolerant soybean represents the leading GM crop. This data has not been changed since the first areas were sown in 1996. Multinational chemical companies which were exponents and financiers of transgenic projects have predominantly taken care how to facilitate the production process for the farmers, i.e. how to make this process safer and more profitable, and then, or in the first place, how to capitalise on investment in such projects as quickly as possible. In this way, transgenic programs with herbicide resistance genes were forced even though for example for corn there is a whole range of herbicides of high quality. Theoretically, it is, of course, possible to create plants tolerant to almost all herbicides, although commercial applications have only economically more important plant cultivars and herbicides of favourable properties (glyphosate, gluphosinate ammonium, imidazolinone herbicides, sulfonylurea herbicides, cyclo-hexandions,

from the initial 6.9 million ha in 1997, to 81.5 million ha in 2019 (or 43% out of total areas under GMO). Starting in 2019, for the first time, the areas under crops with two or three simultaneous genetic modifications were larger than the previously mentioned and occupied 85.1 million hectares or 45% of the total area under GMOs. Areas under crops with modified insect resistance have mostly stagnated in the last decade, and in the year before last, they were on the number of 23.8 million hectares or 12% of the total area under GMOs.

GMO proponents claim that GMOs have led to increased quality and fertility of crops, an increase in the quality of food products (longer durability and better tolerance to transport conditions), as well as a better resistance of crops to disease, insects and weeds.<sup>166</sup> It has been stated that GM technology is intended to widen the area of crop growing, improve the tolerability to low temperatures or draught and increase the exploitation of currently non-productive degraded soils by growing better-adapted crops. The elements of the food produced in this manner would be of greater quality and enriched by essential amino acids, mineral substances, vitamins and non-caloric sweeteners.<sup>167</sup>

The idea is that, for example, genetically modified tomatoes and peppers will produce significant amounts of lycopene,

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bromoxynil, etc.).

<sup>166</sup> An example has been mentioned of a rapid increase in the yield of sweet potato in Africa by introducing transgenic cultivars with installed resistance to Feathery Mottle Virus. Without the application of pesticides, about 60% of yield used to be lost due to the attack of this virus.

<sup>167</sup> Desirable nutritional properties such as modified proteins or fat content are particularly significant, because, as it is generally held, for example, genetically modified rice containing more  $\beta$ -carotene and iron will contribute to resolving the problem of their deficiency in the countries where rice is the major food source, which should directly contribute to the mitigation of the risks of blindness and anaemia. Unfortunately, although this seems to be a humane idea, the project of so-called "golden rice" was demystified as far back as 2000 and, despite high investments, it has turned out to be a complete failure in resolving the mentioned problems. For more details see Marijan Jošt and Thomas S. Cox, *Intelektualni izazov tehnologije samouništenja* (Križevci: Matica hrvatska – Ogranak Križevci, 2003), 93-102.



which is a highly important anti-oxidant. The application of biotechnology has also increased the level of unsaturated fatty acids in canola, soybean, sunflower and peanuts, which increase the biological and nutrient properties of oil. The carbohydrate content can be also modified by biotechnology and, as a result, tomatoes with a higher content of dry matter, more suitable for industrial processing have been created. Some tropical crops, such as bananas, are genetically modified to produce proteins which can be used as vaccines to prevent hepatitis, dysentery, cholera, diarrhoea or other stomach infections characteristic of developing countries. The futuristic representation of genetically modified plants also suggests their medicinal properties, let's say potato, banana and tomato, which could be modified to contain vaccines, while for example, tea will become flavonoid-enriched. The project of modifying plants to produce insulin has been started to enable insulin regulation through nutrition instead of by injections. Transgenic organisms are also supposed to, according to this optimistic projection, enable the production of cheaper medicines and organ transplants. By applying the new biotechnology, eventually, environmental protection will be raised to a higher level by microbiological purification of polluted watercourses and waste waters and by decreased application of chemical substances in agriculture (herbicides and pesticides).

However, it needs to be said that at this moment majority of things related to so-called second and third generations of transgenic plants<sup>168</sup> have not progressed much further from

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<sup>168</sup> Generally, three generations of genetically modified plants can be distinguished: the first generation has been known for a long time and consists of projects such as resistance to herbicides, viruses or insects. Recently, genetic modifications have become much more complex, they imply the introduction of a larger number of genes into the genome of the host plant, so-called stacked properties (an example is the resistance of corn-to-corn borer and total herbicide). Simultaneously there are attempts to change the number of existing metabolic paths in the plant, by deactivating the undesired and/or activating desired genes, therefore it is expected that this second generation of transgenic plants will be marked by genotypes with altered nutritional values. These so-called output

proclamations. Their realization implies that first of all transgenic technology needs to become widely accepted, which still is not the case. A particular problem is the fact that GMO promoters quite rarely mention, or even consciously avoid mentioning, the negative effects of these products. In this way the findings of experiments showing that GM food causes a potential risk to human health are minimized,<sup>169</sup> harmful effects upon the environment or general deterioration of the quality of crops. The topic of endangering traditional agricultural production has also been neglected, by direct interventions of multinational companies when laws or directives are passed, whereby they undoubtedly demonstrate the corporate power of money, as well as classical dilemmas related to the risk of irreparable damage upon present and future generations which can be inflicted by biological heritage.<sup>170</sup>

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properties shall supposedly keep fruit and vegetables fresh longer, affect healthier fats and oils, increase nutritional value such as for example higher vitamin contents, creation of soybean with more anti-cancer proteins (genes found within the same genome) and a wide range of high-value foods (for example high-lysine maize). The third generation, so-called special properties, probably will represent plants that will be used for the needs of the pharmaceutical industry as bioreactors or as an efficient method of creating and using vaccines.

<sup>169</sup>The American company Pioneer Hi-bred International in order to increase the content of proteins introduced a gene from Brazil nut responsible for this property into soybean. Thus modified soybeans were causing allergic reactions in people allergic to Brazil nuts, so the project was soon withdrawn. Another example that led to identical consequences was a transgenic tomato containing a fish gene, which has understandably caused problems for people who are allergic to fish. Consult also Jeffrey M. Smith, *Seeds of Deception* (Iowa: Yes! Books, 2003).

<sup>170</sup>Spreading of GM crops can indeed pose a threat to biodiversity, particularly at the centres of origin of agricultural plants, i.e. in those regions of the world where the specific species of important crops originate from. These centres of origin are also characterised by the highest genetic variability for those species and can be used as useful gene sources in spreading the genetic variability in conventional breeding. Due to the transgression of genes from a GM crop to spontaneous (indigenous relatives) these natural resources of useful genes may be significantly endangered. The threat is even greater since GM seeds are brought illegally into many countries and often even the producers do not know what they saw. It is interesting that multinational companies, which are very consistent in the protection of their own property and patent rights, do not exhibit the same promptness and interest to protect their rights in the case of growing irregularly imported GM seeds to certain countries, without a signed contract.



The author of this book is at the standing point that patenting living organisms by multinational companies is bioethically<sup>171</sup> unacceptable and unjustly, not only because of monopolies in the production and trade of GM plants but also because of attempts to achieve domination over life itself. These critical observations indicate that in the production and trade of GMOs, the observance of basic principles of bioethics, set by Tom L. Beauchamp and James F. Childress, such as nonmaleficence and autonomy, as well as justice and beneficence, is neglected or at least relativized.<sup>172</sup>

All of this shows how much it is necessary to have a discipline which would be a segment of bioethics and would be related to specific characteristics of food production and dilemmas resulting from modern biotechnology processes. This discipline is called agricultural ethics, and it generally should evaluate why something in agriculture should be considered either as good or bad, i.e. as right or wrong. Agricultural ethics should consider philosophical, scientific, social, legal and economic aspects of agricultural issues and provide guidelines for making decisions for their resolution. The main characteristic of agricultural ethics in other words should be comprised of the alignment of social and scientific responsibility.

In the 21<sup>st</sup> century the major dispute between conventional and alternative agriculture will likely be related to the level of potential degradation of the environment. For elementary protection of environmental integrity, a comprehensive approach which takes care of nature is necessary, instead of simple economic and utilitarian reasoning, for example, that pesticides accommodate yield increase, and so that could be a top argument in favour of their unselective use. The common behaviour of a typical scientist was until recently characterized by scientific reduction-

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<sup>171</sup> See Tomislav Krznar, *U blizini straha* (Karlovac: Veleučilište u Karlovcu, 2016), 189-218.

<sup>172</sup> Tom L. Beauchamp and James F. Childress, *Principles of Biomedical Ethics* (New York: Oxford University Press, 2019).

ism, thinking and deciding about science in its narrowest part, excluding or only slightly mentioning the interdisciplinary method. Luckily, there are more and more scientists who are changing their original approach and are starting to look at the problems in agriculture in total, by taking into consideration the knowledge from various disciplines when making judgments about the use or non-use of a certain methodology and technique. Agricultural ethics actually facilitates a holistic way of perception and making judgments in agriculture as an activity.<sup>173</sup>

Besides scientific discussion on the production and use of GMOs, which, it has been shown, do not have the same value mark, nor they offer simplified answers to numerous controversies regarding new technology, we need to consider and look back at a well-known myth that on Earth there are too many people and not enough food<sup>174</sup> and that the solution for such a situation lies in so-called “Grene Revolution.”<sup>175</sup> Most of the GMO proponents after they have exhausted their arsenal of various scientific or quasi-scientific arguments in favour of transgenic technology, pull out the “key” argument that this entire revolution was conceived with the main idea to finally resolve or to more efficiently proceed towards the solution for a highly humanitarian aim that there are no hungry and undernourished people in the world.<sup>176</sup>

<sup>173</sup> Consult the final sentences of the first chapter of this book, “I. Science *versus* Bioethics: Principles or Values.”

<sup>174</sup> A thesis based on Thomas R. Malthus’s paper *An Essay on the Principle of Population, as It Affects the Future Improvement of Society*: <http://www.esp.org/books/malthus/population/malthus.pdf>, from the end of the 18<sup>th</sup> century, which expresses a claim that the number of people on the planet earth is increasing by geometric progression and the food production by arithmetic progression and that this may endanger the survival of humans as a species. Malthus directly influenced Charles R. Darwin; see Charles R. Darwin, *The Origin of Species*: [http://darwin-online.org.uk/converted/pdf/1859\\_Origin\\_F373.pdf](http://darwin-online.org.uk/converted/pdf/1859_Origin_F373.pdf), especially his idea about the limits of the population increase due to limited food resources, or more precisely said, he inspired Darwin to postulate his idea of the mechanism of natural selection. See Eliot Sober, *Filozofija biologije* (Beograd: ПЛАТΩ, 2006), 19-21.

<sup>175</sup> More elaborately about twelve myths about world hunger in Frances M. Lappé, Joseph Collins, Peter Rosset, and Luis Esparza, *World Hunger: Twelve Myths* (New York: Grove Press, 1998).

<sup>176</sup> As an argument in favour of the necessity of GM technology estimations made by UN

A thorough approach to this problematic distorts the thesis of GMO proponents, as well as the intentions of the previous twenty-five year-long expansion in growing and production of transgenic plants. If transgenic technology produces great results, particularly in developing countries, how is it possible then that a quarter of a century after the start of the intensive growing of commercial GM organisms more than 690 million on Earth is starving and about 2 billion people face moderate or serious dietary uncertainty?<sup>177</sup> How is it that, according to relevant data, 9 million people die each year from hunger or diseases directly related to food shortages (of which 3.1 million are children), which is more than from AIDS, malaria and tuberculosis combined, and at the same time a third of the total food produced in the world is not used or thrown away? Why did, from the global perspective, prices of food constantly growing in the last few years, if almost all economic indicators are speaking in favour of GMOs, and the areas under these crops are constantly expanding?

How could we comment and understand the warnings of UN experts that international cereal stocks have reached the lowest level in the last three decades, and that in 2021 at least 45 countries (34 in Africa, 9 in Asia and 2 in Latin America and the Caribbean) will face food scarcity?<sup>178</sup> How come we have already started to talk about the global crisis regarding food, which does not affect only the poor in developing countries, but erodes the

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are mentioned that the number of people on planet Earth by the year 2050, according to moderate projections, will rise to 9.8 billion people, out of which 8.6 billion will live in developing countries. In addition, it is mentioned that the amount of farmland *per capita* will be lowered from 0.25 hectares in 1998 to 0.15 ha in 2050, and that the total area for growing plants will remain approximately the same i.e. 1.5 billion hectares. Since, by those who affirm GMOs, the yield of cereals in the last decade of the 20<sup>th</sup> century was growing at the modest rate of 1% annually, and it is necessary to at least double the production of food in comparison to the present level, a complex of measures is proposed in which the transgenic technology is taking a central place.

<sup>177</sup> Data taken from *The State of Food Security and Nutrition in the World*, <http://www.fao.org/3/I9553EN/i9553en.pdf>.

<sup>178</sup> Data taken from *GIEWS – Global Information and Early Warning System*, <http://www.fao.org/giews/country-analysis/external-assistance/en/>.

income of their middle class the famous economist Jeffrey D. Sachs says that it is the worst such crisis in the last more than 30 years? Of the just mentioned 2 billion people who have problems in providing adequate amounts of food, there are 88 million people in Europe and North America. According to the author, the world is far from the proclaimed goal of eradicating hunger by 2030. Moreover, if existing trends continue, it is assumed that the number of hungry people will increase to 840 million or 9.8% of the total population by that year.

Present information seems even more curious when compared to the data which shows that food production in the world is following the rise of population, i.e. that the rise in food production is about 2%, while the rise of the population is 1.05%.<sup>179</sup> How are we to align the previous catastrophic numbers with the data that the harvest in 2020 was one of the best ones in human history – in the world namely around 2.77 billion tons of cereal grew?<sup>180</sup> The inevitable conclusion is that in the world there are enough wheat, rice and other grains to provide 3500 calories a day per person, without including into this calculation many other common types of food – vegetables, beans, fruit, meat, fish... Based on the statistical data of the UN it can be concluded that there is enough food to ensure at least 2 kilograms a day per human, being the following: somewhat over 1 kilogram of grains, beans and nuts, around half a kilogram of fruit and vegetables and in addition almost half a kilogram of meat, milk and eggs – quite sufficient to make the majority of people on the planet obese!

Of course, somebody could say that these data are statistically average and that this is not the case in poor countries in the southern hemisphere. However, the data say that a significant

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<sup>179</sup> These data show that Malthus's hypothesis and assumptions do not have support in actual documents.

<sup>180</sup> A part of the answer may lie in the fact that only 48% of yield is intended for human food, a total of 35% goes for animal food, while up to 17% will be turned into contemporary ecological fuel bioethanol.

percentage of undernourished children under five years of age and living in developing countries actually live in countries which have a surplus of food. India has since mid-1980 become praised as the country which reached self-sufficiency in food production or even became a food exporter. It would not be unusual if at the same time in India around 2000 children did not die every day due to the consequences of being undernourished, and over 189 million of its inhabitants were not hungry.

In sub-Saharan Africa, over 237 million people suffer from hunger, and this number has been constantly increasing since the beginning of the “Green Revolution,” when it amounted to around 95 million. At the same time, in this part of Africa, which represents a paradigm of unsuccessfulness of the “Green Revolution,” and unfortunately the most drastic example of the negative effects of lack of food on all life parameters, there are a dozen countries which because of the demand of developed world for “more profitable food” (coffee, cacao, ornamental plants), reformed their agriculture towards this direction and became net exporters of food.<sup>181</sup>

In the USA the situation is quite paradoxical: it produces and exports 2/3 of the global wheat production and 90% of soybean, while before the coronavirus pandemic, more than 35 million people faced hunger, including more than 10 million children.<sup>182</sup>

When the very contributions of the “Green Revolution” are more closely considered it can be observed the success in the reduction of number of hungry people in the world is uneven. The number of hungry people in developing countries

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<sup>181</sup> Certainly, among the causes of dying of hunger in Africa we can state also frequent and long-lasting draughts, as well as the expansion of deserts (Sahara expands annually even for 1.5 million hectares, i.e. 15.000 km<sup>2</sup>). We should not forget about the demographic explosion, epidemics of HIV/AIDS, malaria, a permanently unstable political situation caused by straight-lined borders drawn by former colonizers, exploitation of ore and oil by previous owners, corrupted political circles and some of the worst dictatorships in the history of humankind.

<sup>182</sup> <https://www.feedingamerica.org/hunger-in-america/facts>.

from the end of the 1960's to the end of the second decade of the 21<sup>st</sup> century reduced from 960 million to 690 million, which certainly is a great success having in mind the rise in the population in the world for that period from 3.6 billion to around 7.9 billion, out of which the largest number was certainly recorded in the mentioned countries.

However, the mentioned data are less impressive if we take out China from the statistics. Namely, in the same period, the number of hungry people in China was reduced from nearly 390 million people to 150.8 million (so almost 240 million). The data for other regions of the world excluding China show that the number of hungry people in them was stagnating at best, as at one time in Latin America or in the Caribbean (lately, unfortunately, no more), or it was rising, like in the South Asia and especially Sub-Saharan Africa. To put it more precisely, the number of hungry people in the rest of the world in the given period decreased from 570 million to 540 million people (30 million), which leads us to an interesting dilemma: whether the "Green Revolution" or the "Chinese revolution" was more successful?

It is clear that even if GMOs would bring about a drastic increase in yield, which was not unambiguously confirmed, hunger would not be extinguished because the concentration and distribution of economic power would not change, particularly the access to arable land and the buying power of the poor (689 million people on the planet has a wage lower than two dollars, a figure representing the extreme poverty line, while just under 2 billion people disposes only with 3.20 dollars per day).

Even the World Bank (WB) concluded that a rapid increase in the production of food does not automatically mean a reduction in the number of hungry people.<sup>183</sup> They conclude that the

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<sup>183</sup> Higher yields should, automatically, lead to higher profits for poor farmers (according to the data provided by *ISAAA* between 16-17 million small and poor farmers from developing countries are involved in the production of GMO), and to enable them to



issue of hunger may be mitigated by “redistribution of the buying power and the resources in favour of the undernourished ones.” In short, if the poorest do not have enough means to buy food, increased production would mean nothing to them. Introducing new technologies will at present distribution of resources contributes to ever greater concentration of power and money in developed and rich countries, with possibly even more negative consequences upon the developing countries and the poverty in them. A tragic consequence of all of this will be more produced food in the world and even more hungry people!

Eventually, the author is at the standing point that the main issue is not whether “green,” “gene” or some other subsequent science and technological revolution in the production of food will be good enough and adequate to mitigate or extinguish the problem of hunger in the world. The initial error was made in the initial thesis, since resolving such a fundamental issue of humankind most certainly does not primarily depend on the profession itself, but significantly more on the agrarian strategy which a certain country will adopt, i.e. on the realization of a series of organizational, economic and political measures which are to enable the minimalization of a deep and threatening social inequality among people.

Specifically, when agricultural production is concerned, systematic measures are necessary that a community needs to adopt, to enable the overbridging of a gap between the poor and rich farmers. This can be achieved by the stimulation of land reforms and by the adoption of other compatible legal

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get out of the vicious circle of poverty. If we carefully consider what Miguel Altieri and Walter Penuel wrote (Miguel Altieri and Walter Penuel, “GM Soybean: Latin America’s New Colonizer,” <https://grain.org/es/article/entries/588-gm-soybean-latin-america-s-new-colonizer>), this figure and the entire thesis can be questioned. The author is of the opinion that, considering the mentioned fact that around 43% of area under GMO, i.e. 81.5 million hectares, are under herbicide resistant plants, and that in developing countries such crops are cultivated for export by large agricultural producers, profit from their production and use will belong to primarily wealthy people.

acts, to transfer smaller agricultural producers towards the centre of economically shaken traditional agriculture.<sup>184</sup> To be able to implement these measures it is necessary to achieve at least a minimal agreement in the wider social community on the principles of social justice and solidarity. Certainly, the elements of the mentioned consensus, in addition to the fact that they need to exist inside the state, need to be present in the wider perspective, for the entire strategy to show more significant results not only at the local but on the regional and global levels.

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<sup>184</sup> If scientists and philosophers studying bioethics can have any kind of role in mitigating and eliminating of the foods scarcity issue, this can be done as well by promoting the idea that the transformation of agricultural production into its sustainable development through a series of measures, one of which is related to the stimulation of so called ecological agriculture is recommendable. Such agriculture implies allocation of priority to recycling of agricultural products and wastes in comparison to artificial means of production (mineral fertilizers, pesticides, chemical agnes, genetical engineering). It also includes the use of biological and mechanical methods of growing instead of chemical, the increase of ecological diversity of agricultural production, as well as the use of plant and animal wastes. The intention is to stimulate the production based on completely natural processes, through an optimal crop rotation, by sowing plants which recover nitrogen in the soil and by use of manure.



## VI. Cheating in Sports: A Rhetorical Question or Permitted Practice

When paraphrasing Augustine and his thinking about the concept of time,<sup>185</sup> it could be said that when no one asks what sport is, most people think they know the answer. When, however, one tries to mentally grasp the concept of sport, the answer seems to somehow elude.<sup>186</sup> The problem arises due to relatively frequent, differentiated and uncritical use of the term ‘sport,’ as well as because the ‘self-understanding’ of a term is never sufficient while its familiarity is never philosophically relevant because it does not say much about the sport itself nor allows for its cognition. In other words, it is not sufficient to suppose what sport is, that is, to have an idea about it, but it must be articulated conceptually. There are numerous definitions of sport offered by various international organisations, however, three of these will be mentioned in this chapter. Sport is defined by the UNESCO Committee as:

Any physical activity which has the character of play and which involves a struggle with oneself or with others, or a confrontation with natural elements.<sup>187</sup>

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<sup>185</sup> See Sveti Avgustin, *Ispovesti* (Beograd: Grafos, 1989), 13.

<sup>186</sup> The *Law on Sports of the Republic of Serbia* (Official Gazette of the RS, no. 10/2016) [Zakon o sportu Republike Srbije, Sl. glasnik RS, br. 10/2016] stipulates that sport is an activity of particular significance for the Republic of Serbia, as well as that everyone has the right to engage in sports. This law stipulates what is covered by sports activities, what are sports activities, mentions sports recreation (recreational sports) and high-performance sports, explains what a sports organisation is, who athletes and athletes/competitors are, their rights and obligations and much more, however, there is no explicit definition of the sport itself. The closest to the definition of sport is the second sentence of Article 2 of this Law: “Sport is a part of physical culture that includes any form of organised and unorganised performance of sports and sports activities by individuals and legal entities in the sports system, in order to meet human needs for creativity, affirmation, physical exercise and competition with others.” *Law on Sports of the Republic of Serbia*, trans. Željko Kaluđerović, [https://www.paragraf.rs/propisi/zakon\\_o\\_sportu.html](https://www.paragraf.rs/propisi/zakon_o_sportu.html).

<sup>187</sup> <http://www.answers.com/topic/sport>.

In the text that follows it is added that, if this activity includes a competitive aspect, then it must always be performed in the spirit of sportsmanship. The conclusion that is drawn is that there can be no true sport without the idea of fair play. The Council of Europe has determined that sport:

Means all forms of physical activity which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels.<sup>188</sup>

In the Report of the UN Inter-Agency Task Force on “Sport for Development and Peace,” sport in a broader sense means:

All forms of physical activity that contribute to physical fitness, mental well-being and social interaction. These include play; recreation; organized, casual or competitive sport; and indigenous sports or games.<sup>189</sup>

What is first discussed in these definitions of sport is that it is a form of physical activity. Two of the three cited definitions then say that sports should contribute to the improvement of physical fitness, mental well-being, and the forming of meaningful social relationships. Thirdly, a specific characteristic of sport that is emphasized in all definitions is its competitive nature. Sport is, in the end, associated with play or is considered a physical activity that implies the property of play.<sup>190</sup>

Once the essence of sport has been determined in general terms, one can proceed to consider the rules of sport, moral values in sport and fair play. The absence of standardized rules in sports

<sup>188</sup> <http://www.bris.ac.uk/sport/development/>.

<sup>189</sup> United Nations, *Sport for Development and Peace: Towards Achieving the Millennium Development Goals*, 2, <http://www.un.org/themes/sport/reportE.pdf>.

<sup>190</sup> Consult also Tomislav Nedić and Matija Mato Škerbić, “Definiranje sporta u hrvatskim i međunarodnim pravnim aktima: na sječištu prava i filozofije,” *Studia ethnologica Croatica* 32, no. 1 (2020): 155-181.

allows participants to play without restriction, to agree on several regulatory measures before the start of the game, or to create rules during the game as needed. Such a 'relaxed' approach is possible only in some games that are played by children or in ad hoc situations of recreational sports activities.

Increasingly, even in voluntary activities, and especially in organised and official sports events, the existence of clear rules that regulate the game itself is required. The rules are usually divided into constitutive rules and sportsmanship rules. The rules that guide the behaviour in a particular game are called constitutive rules. For example, the rules of football that define a goal, an out and a goal-out, are constitutive rules. These rules have developed gradually due to the need to standardise the competition and to regulate aspects such as the length of the game, the number of players and the eligibility of participants. In addition to prescribing game-specific skills, strategies and techniques that differentiate football from basketball, and then both from handball, the constitutive rules determine what actions players are allowed to take during the game itself.

In addition, constitutive rules limit the actions of players. These rules limit behaviours to the ones that are deemed appropriate or necessary to enable certain actions in the sport to take place. For example, although football is considered a 'men's' game in which strong physical contact between players is allowed, there is a strict boundary which shows when such contact ceases to be acceptable. Hitting an opposing football player from behind or a rough stop inside the so-called penalty area is almost automatically sanctioned by a foul or penalty for the team against whose player the foul was committed. A football player who has committed an offence is additionally sanctioned by a verbal warning, a yellow card or, in some cases a more serious offense, he is sanctioned by being excluded from the game, and even by being banned from playing in the following few matches.

The constitutive rules determine the structure of a particular sport, enabling the competition to be fair for all participants. These rules standardise the manner of playing so that each player gets an equal opportunity to stand out. Constitutive rules regulate i.e. they can regulate various factors such as age, weight, skill levels and maturation of young people in certain levels of competition. They prescribe the age, gender, residence and academic performances required of athletes who are also pupils or students, at the same time.<sup>191</sup>

The second type of rules, sportsmanship rules, refers to the inherent quality when playing a game. The inherent quality of playing a game refers to the honour of following the letter and spirit of the game, not only the rules of the game. Many of the sportsmanship rules prevent the behaviour of the player who puts victory above everything else while neglecting the well-being of the other party and the holding of competition between equal opponents. The sportsmanship rules are designed to prevent morally questionable and sometimes violent behaviour in sports.<sup>192</sup>

In addition to this general approach and frequent mentioning of sportsmanship by various stakeholders in sports, there is still a dilemma as to what sportsmanship actually is and who it refers to. Sportsmanship represents an unwritten moral code based on the virtues of fairness and honesty. The supreme principle of sportsmanship, in the opinion of some authors,<sup>193</sup> would be contained in the intention to always increase the enjoyment of an activity, both one's enjoyment and

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<sup>191</sup> Constitutive rules are most often prescribed and regulated by official sports organizations (in football these are FIFA, UEFA and national football federations; see <https://fss.rs/dokumentacija/propisi-fifa-i-uefa/>). The first uniform rules of football were established in 1863 in parallel with the establishment of the English Football Association.

<sup>192</sup> For more details about violence today, especially in connection with sports consult Dragan Koković, *Društvo, nasilje i sport* (Novi Sad: Mediterran Publishing, 2010).

<sup>193</sup> See James W. Keating, "Sportsmanship as a Moral Category," in *Philosophic Inquiry in Sport*, eds. William J. Morgan and Klaus V. Meier (Champaign, IL: Human Kinetics, 1995), 147.

the enjoyment of one's opponent. According to the reduced interpretation of sportsmanship, it is characteristic only for recreational activities in sports, while it cannot be applied to serious competitive activities in sports. The attitude in line with which a competitor should make an appropriate effort in order to encourage a good game of the opponent and thus increase the opponent's and his/her own enjoyment is no longer met with (plebiscitary) approval of athletes or the public when it comes to the competitive aspect of sports.

In today's reality, the importance of victory is (over)emphasised, the violation of rules,<sup>194</sup> the exploitation of athletes is ignored, and the creation of unfair conditions of competition is not prevented. The prevailing attitude is that sport and play are simply defined by reference to constitutive rules, with the potential to acknowledge that certain conventions allow for legitimate tactical moves within the game itself.

All these issues are related to active forms of morality. In modern philosophy, the issue of active forms of morality has been transformed into a fundamental axiological concept, i.e. a value theory, in which is assumed a general expression of the issue of moral values, as well as a concrete expression of the issue of moral norms. Moral values and moral norms are forms of modern understanding of the purpose of human action and

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<sup>194</sup> Probably the earliest recorded violation of the rules in sports is in the Book XXIII of the *Iliad*. Homer gives an extensive account of the central sporting event - the carriage race, including the fraud that occurred during the race itself. The poet narrates how Antilochus and Menelaus' horses ran side by side until Antilochus cunningly broke out in front of Menelaus, and how Menelaus then prevented Antilochus from receiving the award at the award ceremony. Menelaus took the sceptre in his hands and angrily accused Antilochus of embarrassing his heroism, and of deceitfully managing to reach the finish line with his slower horses before Menelaus' horses, which were, of course, better. Menelaus, then, gives a judgement by himself in a specific way, by inviting Antiloch to swear in front of everyone 'as is the appointed way' (ἡ θέμις ἐστίν), that he did not overtake him by deception and won second place in the race. Antiloch immediately admits his own guilt, justifying himself with his youth and offering adequate compensation. Such an explicit confession softened Menelaus, so he forgave Antilochus. Consult Homer, *Ilijada* (Beograd: Prosveta, 1968), XXIII pevanje, 404-426.

how the effective character of morality is realized. Moral values are understood as a special form of value in general that concerns an individual in his general and specific life activities. As such, a man can act, and even act morally, because he is motivated by certain desires, interests, intentions and opinions. The driving force is a certain perception or system of perceptions that create a value. For this value, or value system, to be realized in immediate concrete action, it must take the concretized form of a moral ideal, that is, desirable moral values, which must be followed in moral action. General social moral values are created by mutual confrontation, mediation and harmonization of value-related attitudes of different people. This harmonisation can hardly be fully implemented, because different people and different social groups can form, accept and follow different value systems. These systems in modern societies, in principle, cannot be imposed on people, but represent a matter of the freedom of choice and decision of an individual or a social group. There is no universal system of moral values that applies to all times, all societies and all social groups and individuals.<sup>195</sup> The root of their differences lies in the fact that today's man has the right to freedom of moral beliefs and freedom of conscience. The prevailing tendency of the time, however, leans towards trying to standardise moral values, somehow, and make them generally acceptable.<sup>196</sup>

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<sup>195</sup> Michael Walzer, similarly, believes that it is not possible to build a theory of justice outside the historical and cultural context, that is, without the meaning and significance of social goods to which the principles of justice refer. In other words, he advocates the view that a valid theory of justice represents only one elaboration of already existing concepts of justice which are based on conventions and which, therefore, vary from case to case. See Michael Walzer, *Spheres of Justice: A Defense of Pluralism and Equality* (New York: Basic Books, 1983).

<sup>196</sup> John Rawls, following in those footsteps, tries to develop a distributive theory of justice that will be universally plausible for all societies. His theory of justice is focused on the adaptation of two fundamental principles of justice that simultaneously ensure a just and morally acceptable society. The first is that each person should have an equal right to the broadest modality of equal fundamental liberties, which are compatible with a similar modality of liberties for others. The second principle emphasises that social

The first moral value that is most often suggested in sports is justice. Of the many types of justice,<sup>197</sup> distributive, procedural, retributive, and compensatory justice will be specified here.

Distributive justice in sports is related to the concept of equal intrinsic values and dignity of each athlete. This, of course, does not mean that all athletes will be treated in a completely identical way. In football, it would not be fair at all for children, women or people who do not have or have lost a part of their body to play a game with healthy and physically fit adult men. Distributive justice, then, is about equivalent possibilities and not about identical treatment.

Procedural justice is also inherent in moral reasoning and decision-making in sports. It implies that the relevant sports organisations have rulebooks stating which activities are acceptable and which are unacceptable on the field or during the game. In the most general sense, there are rules that teams and players must adhere to in order to participate in a sporting activity at all. If these guidelines or rules are not observed, then sanctions of different intensity and appropriate compensation are applied, and we can talk about the application of retributive and compensatory justice.

Retributive justice, concisely speaking, encompasses the justice of punishing those who have violated norms or laws, while compensatory justice encompasses the perceived justice of doing good to the persons who have suffered some harm or evil in the past.

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and economic inequalities should be regulated in such a way that it is at the same time appropriate to expect them to benefit everyone, as well as to be attached to offices and positions that are open to all. Consult Džon Rols, *Teorija pravde* (Beograd, Podgorica: JP Službeni list SRJ. CID, 1998), 70.

<sup>197</sup> Literature on both philosophy and law mentions numerous types of justice, including anamnestic, distributive, economic, egalitarian, formal, global, civil, international, intergenerational, corrective, commutative, cosmopolitan, compensatory, criminal, procedural, spatial, political, retributive, distributive, restorative, reparative, world, substantive, social, transitional, legal, women's, etc. See Željko Kaluđerović and Orhan Jašić, "Predstavljanje, razumevanje i poimanje *dike i dikaiosyne*," *Pedagoška stvarnost* LXII, br. 2 (2016): 221-234.



Honesty as another moral value represents a condition or ability to be truthful and credible in dealing with others including competitors on the sports ground. The moral value of honesty is based on the assumption that the actor of a sports event will not knowingly lie or cheat.<sup>198</sup> Honesty means that once one accepts the rules of the game, the player must necessarily follow them.<sup>199</sup>

The third moral value is responsibility, which speaks of an athlete's sanity for what the athlete does. Many believe that responsibility<sup>200</sup> is the most dominant moral value in an athlete's life. Athletes are very proud of their sense of responsibility towards the team, the coach, i.e. the manager and the game itself. The responsibility of athletes implies that they are responsible not only for what they do but also for their actions in relation to opponents, and even concerning the game itself. Athletes have a responsibility to play the best they can and reach the highest level of competition. It is also their responsibility to enable their opponents to play at the highest possible competitive level to be able to jointly achieve excellence in the game.

Beneficence is the last of the moral values that will be declared in this chapter.<sup>201</sup> It represents a state of not harming, preventing harm to another, removing harm, and doing good to another. Beneficence is intertwined with sportsmanship and

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<sup>198</sup> Cheating, as stated by Bernard Gert, is an intentional violation of a public system of rules in order to achieve appropriate goals. Bernard Gert, *Morality: Its Nature and Justification* (New York: Oxford University Press, 1998): 194.

<sup>199</sup> According to extensive research conducted in the United States, honesty ranks last among the moral values that have been compared. Consult Jennifer M. Beller and Sharon K. Stoll, "A Moral Reasoning Intervention Program for Division I Athletes," *Academic Athletic Journal* 3 (1992): 43-57; Jennifer M. Beller and Sharon K. Stoll, "Moral Development of High School Athletes," *Journal of Pediatric Science* 7, no. 4 (1995): 352-363.

<sup>200</sup> For more details on the concept of responsibility see the first two chapters "I. Science versus Bioethics: Principles or Values," and "II. Hereditary Genetic Modifications: Gene Therapy or Eugenics."

<sup>201</sup> A specific perspective to the consideration of beneficence and an impulse in a new direction was given by Tom L. Beauchamp and James F. Childress in their *Principles of Biomedical Ethics* (New York: Oxford University Press, 2019).



fair play since it is an act of giving to others above and beyond a mere call to play, otherwise exposed it is a true act of mutual civility. Some aspects of beneficence are, however, from the perspective of today's athletes (in fact today's *Zeitgeist*) difficult to accept. Athletes generally<sup>202</sup> agree that no harm should be done to another competitor and that any harm to the opponent should be prevented. The disagreement starts around the third stated formulation since most athletes do not take the position that their task is to deal with the elimination of damage. Even less do athletes agree with the requirement of doing good to others, considering it inconsistent with reality and the modern concept of competition.

Fair play can be defined as a commitment to the spirit and letter of equality of competitors regarding the rules, and on the pathway of a common search for excellence.<sup>203</sup> Why is it not enough to say that fair play is simply adhering to the rules of the game, as some modern commentators suggest? If fair play were equated with compliance with the rules, and any deviation from the rules was considered immoral, the idea of fair play would be reduced too much, as maintained by this author. Morality would thus be equated with law, and sport would first be defined as a game that is limited by invoking constitutive rules. This formalism in understanding the game may make it possi-

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<sup>202</sup> 'Generally,' because there are athletes in the so-called contact and highly profitable sports that believe that opposing players should be disabled to play the match successfully at all costs, including, unfortunately, intentionally injuring the most important players in the rival team. On the effects of a kind of moral insensitivity of athletes consult Scott R. Kretchmar, *Practical Philosophy of Sport* (Champaign, IL: Human Kinetics, 1994); <https://noizz.rs/kultura/istina-o-najboljoj-americkoj-klizacici-koju-je-mrzero-ceo-svet/k7307qb>.

<sup>203</sup> In conformity with Article 2 of the *Rulebook on Fair Play of the Football Association of Serbia* [Pravilnik o fer pleju Fudbalskog saveza Srbije], fair play means: "Behavior in accordance with moral principles, especially those that are contrary to the concept of sporting success at all costs, behavior that promotes integrity and equal opportunities for all participants. the behavior of the person and values of everyone involved in the sporting event." *Rulebook on Fair Play of the Football Association of Serbia*, trans. Željko Kaluđerović, [https://fss.rs/wp-content/uploads/2019/07/pravilnik\\_o\\_fer\\_pleju.pdf](https://fss.rs/wp-content/uploads/2019/07/pravilnik_o_fer_pleju.pdf). See also Roland Renson, "Fair Play: Its Origins and Meanings in Sport and Society," in *O sportu drugačije*, ur. Ivana Zagorac (Zagreb: Hrvatsko filozofsko društvo, 2014), 223-240.

ble to understand the nature of a game, but it lacks normative sources to be able to face the numerous moral dilemmas that arise in connection with sport.<sup>204</sup>

The situation is similar with the emphasis on implicit conventions that apply to a particular sport. In football, there is a kind of tacit agreement that a tactical foul or the so-called ‘smart’ foul in the midfield is conventionally allowed as a legitimate move to obstruct an opponent’s attack. Once again, trouble in this case is the moral status of the convention itself, how it can evolve and in what manner it could be potentially changed.

For sport to take place in accordance with the principles of fair play, it must be realized following the norms implied by the very essence of sport. Although it is not easy or necessary to draw a sharp distinction between sportsmanship and fair play, it can be said that fair play requires fair winning, but for a sports competition to be successful, it is not crucial, although it is significant, that a competitor encourages good play of his opponents, which is an important feature of sportsmanship. In any case, fair play implies correctness and compassion for oneself, others, the community and the wider environment.<sup>205</sup>

At the beginning and within this chapter, ethics<sup>206</sup> and sports were brought into connection, i.e. certain aspects of them, while in the following paragraphs, they will be considered in relation to the views written or stated by Albert Camus and Thierry Henry. What is the relationship between the words of the famous French writer and writer of philosophical essays Camus and the statements of the former Barcelona football

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<sup>204</sup> Concerning doping and the various moral conflicts it gives rise to, for example, see Evangelos D. Protopapadakis, “The Ethics of Doping: Between Paternalism and Duty,” *Pannoniana: Journal of Humanities* 4, no. 1 (2020): 35-49.

<sup>205</sup> Consult Robert L. Sajmon, *Fer-plej etika sporta* (Beograd: Službeni glasnik, 2006): 65-98.

<sup>206</sup> See Piter Singer, ur., *Uvod u etiku* (Sremski Karlovci, Novi Sad: Izdavačka knjižarnica Zorana Stojanovića, 2004): 179-231; Abdusalam A. Huseinovic and Gerd Irlic, *Istorija etike* (Novi Sad: Književna zajednica Novog Sada, 1992).

player and the French national team player Henry, plus viewed through the prism of ethics and sports? Perhaps things will become clearer after displaying Camus's attitude as stated when he was writing about the general educational significance of sports, i.e. that the only context in which he truly learned the meaning of ethics was sports.<sup>207</sup> Camus was probably on the trail of, often insufficiently reflected, views that sport actually strengthens loyalty, courage, responsibility, altruism, teamwork and the ability to cooperate with others in achieving a common goal, and concern for excellence. The French Nobel laureate, in a word, considered that sport offers a unique opportunity for perfection and refinement of character.

If, on November 18, 2009, Camus could have been present at the rematch of the barrage for going to the World Cup in South Africa between the national teams of France and the Republic of Ireland, certainly, it would at least make him wonder about the above statement. What happened at the mentioned match? The Irish led 1-0 until the 13<sup>th</sup> minute of the first overtime and were a better partner in the game than the French. In the 103<sup>rd</sup> minute of the game, Henry prevented the ball from going out of play with his hand and then passed the ball to the head of his teammate William Gallas, who scored an equalizer, a goal that took France to the World Cup.<sup>208</sup> To make things even more irregular in regards to the result of the match and worse for the Irish, two French players were in an offside position at the free-kick, which is in an illegal position.<sup>209</sup> Referee Martin Hansson from Sweden did not notice any of this and recognized the goal as completely valid.

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<sup>207</sup> Consult Albert Camus, "The Wager of Our Generation," in *Resistance, Rebellion, and Death* (New York: Knopf, 1960), 242.

<sup>208</sup> According to *Britannica Concise Encyclopedia*, football is defined as follows: "Game in which two 11-member teams try to propel a ball into the opposing team's goal, using any part of the body except the hands and arms. Only the goalkeeper, when positioned within the penalty area in front of (his, note Željko Kaluđerović) goal, may use hands and arms." <http://www.answers.com/topic/soccer>.

<sup>209</sup> <https://www.youtube.com/watch?v=fLUxMRYJAso>.

What happened next? The Irish, of course, were indignant, talking about the clear intention of FIFA to prevent the placement of their national team at the World Cup. Their coach Giovanni Trapattoni was so angry after the match that he did not want to talk about Henry's handball, but he said that his team had done a great injustice, that all he asked for was fair play which did not happen at the match concerned.<sup>210</sup> The reports also state that Trapattoni said: "I go to schools and teach children what fair play is, and then this happens."<sup>211</sup> The Football Federation of Ireland requested a new match to be played because, due to the referee's wrong decision to admit an irregular goal, "serious damage was inflicted on the integrity of our sport."

How did the main actor in this controversy, Henry, react? After the match he admitted that he played with his hand, saying: "I will be honest, I played with my hand, but the most important thing is that we qualified for the World Cup. It was a handball, but I was not the referee of the match. What happened? Squillaci was in the jump, I was behind two Irish players. The ball bounced off the ground and hit me in the arm. The referee allowed it. I kept playing, what else was I supposed to do? I do not deny, however, that it was a handball. The main thing is that we passed. The fact that it was so difficult only reinforces the good feeling."<sup>212</sup> Elsewhere, similar statements by

<sup>210</sup> <http://sport.blic.rs/Fudbal/121396/Anri-Igrao-sam-rukom-video>.

<sup>211</sup> <http://www.mondo.rs/v2/tekst.php?vest=153127>.

<sup>212</sup> See <http://sport.blic.rs/Fudbal/121396/Anri-Igrao-sam-rukom-video>. Even more famous than Henry's is Diego Armando Maradona's handball in the quarterfinals of the 13<sup>th</sup> World Cup in Mexico in 1986 against England (consult <https://www.youtube.com/watch?v=-ccNkksrffs>). When he illegally scored against the English, Maradona claimed that 'God's hand' also interfered in the attack of his Argentina. Later, this 'half angel and half devil,' as Maradona was characterized by a journalist from the French *L'Equipe*, stated that he did not see anything controversial in such a goal, which he scored "a little by head, a little by hand," saying that he acted "smartly and deftly." <http://www.atastars.rs/fudbal/13022-svetsko-prvenstvo-meksiko-1986-maradonina-qboja-rukaq>, and: <http://www.index.hr/sport/clanak/maradona-bozja-ruka-nije-bilo-varanje-bio-sam-spretan/311475.aspx>.

Henry can be found, such as: “To be honest, I played with my hand, but I’m not the referee.”<sup>213</sup> France head coach Raymond Domenech said that he was satisfied with the outcome and added that he did not see the captain<sup>214</sup> of his team play with his hand: “Like many in the stadium, I did not immediately see that it was a handball. It was only in the locker room that I realized what had happened. Henry is hurt now, it’s hard for him, but luckily he has the support of his teammates. The referee should be discussed, not him.”<sup>215</sup>

How did the officials of the most important International Football Organization react? The FIFA Disciplinary Committee stated that no article in the disciplinary code could be applied in this specific case. According to their interpretation of the rules, Henry’s offence could have only been sanctioned by the chief referee awarding an indirect kick for the Irish, or by potentially sanctioning the French with a yellow card. “The Disciplinary Committee concluded that there was no legal foundation for conducting the procedure and imposing sanctions,” because, as claimed by the members of this committee, playing with a hand cannot be regarded as a serious infringement as stipulated

<sup>213</sup> <http://www.mondo.rs/v2/tekst.php?vest=153127>.

<sup>214</sup> As a reminder, the captain is the leader of a football team and a moral authority among the players. He is usually the most experienced and even the best player of a team. *The Laws of the (Football) Game* [Pravila (fudbalske) igre] prescribed by FIFA state (p. 20): “Team captains should play an important role in helping to ensure that the Laws and referees’ decisions are respected.” *Laws of the (Football) Game*, trans. Željko Kaluđerović, [http://www.fss.rs/documents/pravila\\_%20fudbalske\\_%20igre.pdf](http://www.fss.rs/documents/pravila_%20fudbalske_%20igre.pdf).

<sup>215</sup> <http://www.sportske.net/vest/medjunarodni-fudbal/domenek-ostavite-anrija-na-miru-raspravljajte-o-sudiji-10582.html>. The then French Minister of Economy, Christine Lagarde, showed more sensitivity for the rules of sports, moral values in sports and fair play than Henry and the French coach. She said that when a match is played under irregular circumstances, FIFA should order a replay of the match. The French physical education teachers’ union said that the way in which their country’s national team qualified for the World Cup in football is shameful. A statement from the union states that the team of coach Raymond Domenech ‘undoubtedly reached the World Cup by fraud.’ The union criticized Domenech and some French football players for their statements after the game, in which they sent the message that ‘the most important thing is to win’ in sports. <http://www.smedia.rs/sport/print.php?id=16833&vest=Sindikata-nastavnika-fizickog:-Sramotan-plasman-na-SP>.

in Article 77a of the FIFA Disciplinary Code.<sup>216</sup> Another version, which appeared in the press, claims that the said action by Henry was not a serious infringement of the rules, i.e. that in accordance with FIFA rules, if a referee fails to sanction such an action, there are no additional punishments that could be administered later on.<sup>217</sup>

What did Henry, but also his teammates and the French coach, show with such an action during the game and reaction after the game? First, he showed that he does not respect the constitutive rules of football, i.e. that he believes that he is not obliged to respect them observed from the perspective of the constitutive rules as such. By stating that he is “not a referee,” Henry confirmed that the rules, as believed by him, are not inherent to football itself, and that they can be relativized, considering that winning is the goal of the highest ontological status. The French footballer then demonstrated disrespect for the rules of sportsmanship, essentially, he considered the opposing players and the team as obstacles that need to be overcome at all costs to achieve the set goal. The idea that an athlete should improve the opponent’s performance so that he would increase the level of his enjoyment of football, as well as the opponent’s, has probably never entered Henry’s mind either. The utilitarian concept of football based on the logic of capital and the lucrative – calculative principle has prevailed over the vision of ‘the most important of the unimportant things in life’ as a way of manifesting the best in man.

As for the moral values, Henry’s action has affected all types of justice spoken of here. He has ‘annulled’ distributive justice because he has turned the idea of equivalence which is based on athletes’ reasonable contributions to the collective into a hubris-

<sup>216</sup> <http://sport.blic.rs/Fudbal//171419/FIFA-nije-kaznila-Anrija-zbog-igranja-rukom>.

<sup>217</sup> <http://www.nadlanu.com/Dynamic/News,intItemID,159590,intCategoryID,471.html>. FIFA officials said that the new match could be played only on the condition that both football federations agree to it, which did not happen due to the rejection of the French.



tic attempt to negate all equivalence.<sup>218</sup> By negating one of the two vital characteristics of dike (the other one being correlativity) Henry has called into question the idea of justice itself. Procedural justice has been distorted because we can say that there are regulative ‘voids’ in the FIFA Code if such a drastic offence cannot be sanctioned by the Rules of the International Football Federation. The fact that Henry was not punished has also affected the retributive principle. Furthermore, since there were no attempts to do good deeds for the Irish team, on account of the injustice they suffered from, compensatory justice was disrupted.

It goes without saying that Henry’s actions and subsequent behaviour are not in conformity with the moral value of honesty. Henry is familiar with the rules of the football game, but he does not want to respect them at any cost, consciously refusing to admit to the referee that he cheated at the game.

Even if Henry showed some ‘responsibility’ towards his teammates and the coach, he certainly did not demonstrate even a minimum of responsibility towards the football game as such.

In terms of beneficence, not only has Henry disregarded the aspect of removing harm and doing well to the Irish, but he completely ignored the position that one should not intentionally do harm to the opponent and that one should prevent harm to another.

The rules of fair play have been ignored both in Henry’s action and in the Football Association of France’s unwillingness to declare that a rematch should take place. They have ignored one of the basic principles stated in the Declaration of the International Fair Play Committee, in conformity with which, fair play is much more than playing to the rules of the game; it’s primarily about respecting your opponent and preserving his or her physical and psychological integrity.<sup>219</sup>

<sup>218</sup> See Željko Kaluđerović and Dejan Donev, “Kaliklova pleoneksija,” *Kom V*, no. 1 (2016): 105-122.

<sup>219</sup> *Declaration of the International Fair Play Committee*, <http://www.friedenspaedagogik.de/>

Henry's action and subsequent statements are reminiscences of the famous remark attributed to Vince Lombardi that winning is not the most important thing; it is the only thing which is relevant.<sup>220</sup> Competition in sports is an activity whose intention is to ensure victory over the opponent, but this should always be achieved within the framework set by sport rules, moral values and fair play. On the other hand, Henry apparently believed that it was not cheating unless the cheater got caught. A slightly more subtle variant of the same thesis would be that it is the referee has to monitor the course of the match and that as long as the player is willing to face the consequences of his actions, if he is caught, then breaking the rules is not immoral.<sup>221</sup> This standpoint cannot be accepted primarily because cheating gives one team or a player an unfair advantage over others. Henry's cheating is not morally acceptable, even if the football rules were 'stretched.'<sup>222</sup> If a particular football match is considered as a joint striving for excellence both by the French and Irish, then cheating, disrespecting the rules of the game or inadequate sportsmanship simply violate the ethics of a sporting event and

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english/topics\_of\_the\_institute\_s\_work/peace\_education\_online\_teaching\_course/basic\_course\_5/fair\_play\_definition\_principles\_rules\_and\_fair\_trade. If, in the end, we look at the definitions of sports which are presented at the beginning of this chapter, Henry violated the aspect concerning mental well-being and neglected the dimension of shaping social interactions and relationships.

<sup>220</sup> Scot Moriss believes that Lombardi's statement was different, that is, that he said that winning is not everything, but that the desire to win is. Consult *The Book of Strange Facts and Useless Information*, ed. Scott Moriss (New York: Doubleday, 1979).

<sup>221</sup> Henry's teammate from Barcelona at the time, Zlatan Ibrahimović, used similar arguments to defend him: <http://www.sportske.net/vest/medjunarodni-fudbal/ibrahimovic-anri-je-bio-u-pravu-kad-je-igrao-rukom-15616.html>. The statement of the Irish Minister of Justice, Dermot Ahern, that if the situation caused by the irregular goal is not corrected, the position that cheating is a legitimate method in achieving victory is not without grounds.

<sup>222</sup> Oliver Leaman provocatively claims that many competitions would be more interesting if they involved cheating, or if some of the players tried to make the rules more 'elastic,' and that such behaviour would give a new dimension to the game which could make it more interesting. He concludes that if cheating is recognized as an option that both sides should accept, then the principles of equality and justice are not compromised at all. See Oliver Leaman, "Cheating and Fair Play in Sports," in *Philosophic Inquiry in Sport*, eds. William J. Morgan and Klaus V. Meier (Champaign, IL: Human Kinetics, 1995), 195-196.



the competition itself, and such acts should, or better yet must, be sanctioned.

Some authors<sup>223</sup> argue that the commercialization of sports that has transformed elite sports into products that can be bought and sold has spoiled the essence of sports. Henry's gesture would, according to this claim, be only an epiphenomenon of the deterioration of moral values in the entire Western civilization. If all this is true, then it is necessary to establish a moral framework that would regulate the effects of establishing a sports market, while upholding the inherent of sport itself. The minimalist version would, therefore, must read that it is implied that the athlete is morally responsible for achieving victory within the rules of the sport in which he is engaged. The existence and functioning of official regulatory bodies as a structural mechanism must be to preserve the integrity and equality of the game itself, even under the conditions of the ruthless world of today's professional football.

If we were to accept that breaking the rules is generally allowed when it is done for the 'greater good,' for example, as the need for France as a great football nation to necessarily participate in the World Cup, then the very idea of sports competition would be delegitimized. Even if winning were the competitor's only goal, it must be achieved by a better performance in the game than the opponent, i.e., based on the existence of standards for the evaluation of the game. Respecting the rules is a way to recognize the same moral status of all those who adhere to the public conditions of the competition and in the application of which every competitor believes. The recognition of the same moral status is important because the interests of other participants in the competition are viewed as being equally important as their own interests, which is assumed in the very idea of fair competition. Finally, for Camus' theory,

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<sup>223</sup> Consult William J. Morgan, *Leftist Theories of Sport* (Urbana and Chicago, IL: University of Illinois, 1994).

that sport makes the harmony between soul and body possible to be, valid, Henry, and the other athletes should keep in mind the second formulation of Kant's categorical imperative:

Act so that you use humanity, as much in your own person as in the person of every other, always at the same time as an end and never merely as a means.<sup>224</sup>

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<sup>224</sup> Immanuel Kant, *Groundwork for the Metaphysics of Morals*, trans. Allen W. Wood (New Haven and London: Yale University Press, 2002), 4:428-4:429.

## VII. Globalization: Integration or Recolonization of the World

Although the term globalization dates further back, it was introduced into wider use in the 1960s, while the onset of the true debates about it is marked in the late 1980s and early 1990s.<sup>225</sup> Despite the large body of literature about globalization that has been published over the last two decades, there still is not a single convincing theory of globalization. Even more, there are no systematic analyses of its major characteristics present today. The hardship lies not only in different approaches to one such analysis but in the different classifications of those approaches. Moreover, globalization is in danger of becoming, if it has not already become, a handy phrase of our times – an omnipotent word that covers a wide span of activities from the global market to the internet,<sup>226</sup> while offering a little insight into contemporary issues.<sup>227</sup>

Due to a variety of criteria used to classify approaches to globalization and a multitude of questions that are thereby revealed, it is hard to provide even an incomplete record of definitions and standpoints on globalization. Even if such a task were possible, that certainly would not be the intent of this author to lay out a list of definitions. Mere compiling of such

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<sup>225</sup>The term, according to Anthony Giddens, has come out of nowhere only to become a key topic in economic, cultural and political discussions today.

<sup>226</sup>Or as Ian Clark says, globalization is everything and anything from the Internet to hamburgers. Ian Clark, *Globalization and International Relations Theory* (Oxford: Oxford University Press, 1999), 35.

<sup>227</sup>It suffices to say that in June 2022 there were more than 250 million websites on globalization, only in English! See [https://www.google.com/search?q=Globalization&xsrf=ALeKk03bfmVvXT8SusLzXviCjeOV-w2b4A%3A1621251802547&ei=2laiYLD-bIN6I9u8P7rmt0Ak&oq=Globalization&gs\\_lcp=Cgdnd3Mtd2l6EAMyBAGAEEMyBAGAEEMyBggAEAcQHjIECAAQQzIGCAAQBxAeMgYIABAHEB4yBggAEAcQHjIGCAAQBxAeMgYIABAHEB4yBggAEAcQHIC-ywxYvssMYOHNDGgAcAJ4AIAB4wGIAasDkgEDMi0ymAEAoAEBqgEHZ3dzLXdpesABAQ&scIent=gws-wiz&ved=0ahUKEwiwsKDO0dDwAhVehP0HHe5cC5oQ4dUDCA4&uact=5](https://www.google.com/search?q=Globalization&xsrf=ALeKk03bfmVvXT8SusLzXviCjeOV-w2b4A%3A1621251802547&ei=2laiYLD-bIN6I9u8P7rmt0Ak&oq=Globalization&gs_lcp=Cgdnd3Mtd2l6EAMyBAGAEEMyBAGAEEMyBggAEAcQHjIECAAQQzIGCAAQBxAeMgYIABAHEB4yBggAEAcQHjIGCAAQBxAeMgYIABAHEB4yBggAEAcQHIC-ywxYvssMYOHNDGgAcAJ4AIAB4wGIAasDkgEDMi0ymAEAoAEBqgEHZ3dzLXdpesABAQ&scIent=gws-wiz&ved=0ahUKEwiwsKDO0dDwAhVehP0HHe5cC5oQ4dUDCA4&uact=5). On the possibility of global bioethics in the light of the recent pandemic see Roberto Andorno and George Boutlas, “Global Bioethics in the Post-Coronavirus Era: A Discussion with Roberto Andorno,” *Conatus – Journal of Philosophy* 7, no. 1 (2022): 185-200.

information would be useless unless supported by a thorough analysis of its sources and the context of recorded uses. For a philosopher, in other words, it is far more important to focus on definitions and interpretations of globalization as classified according to an appropriate set of standards.

Further on, I will first note a few definitions given by the well-known theorists of globalization, and then I will show some of its most relevant classifications. To keep the research undissolved into numerous elaborations of globalization itself, most attention will be devoted to David Held's classification. I will not debate whether the noted classifications are thorough and consistent, and where is the subtle, yet clear, line between the theory of globalization and, (more or less) comprehensive standpoints about it, as well as theoretical generalizations. Here are some leading definitions of the concept of globalization:

- The inexorable integration of markets, nation-states, and technologies to a degree never witnessed before in a way that is enabling individuals, corporations and nation-states to reach around the world farther, faster, deeper and cheaper than ever before ... the spread of free-market capitalism to virtually every country in the world.<sup>228</sup>
- The integration of the world economy.<sup>229</sup>
- Integration on the basis of a project pursuing “market rule on a global scale.”<sup>230</sup>
- Deterritorialization – or ... growth of suprateritorial relations between people.<sup>231</sup>

<sup>228</sup> Thomas L. Friedman, *The Lexus and the Olive Tree* (New York: Farrar Straus Giroux, 1999), 7-8.

<sup>229</sup> Robert Gilpin, *Global Political Economy* (Princeton, NJ: Princeton University Press, 2001), 364.

<sup>230</sup> Philip D. McMichael, *Development and Social Change* (Thousand Oaks, CA: Pine Forge Press, 2000), xxiii, 149.

<sup>231</sup> Jan A. Scholte, *Globalization: A Critical Introduction* (New York: Palgrave, 2000), 46.

- It is nothing but “recolonization” in a new garb.<sup>232</sup>
- The compression of the world and the intensification of consciousness of the world as a whole ... concrete global interdependence and consciousness of the global whole in the twentieth century.<sup>233</sup>
- A social process in which the constraints of geography on social and cultural arrangements recede and in which people become increasingly aware that they are receding.<sup>234</sup>
- The intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa.<sup>235</sup>
- The historical transformation constituted by the sum of particular forms and instances of ... [m]aking or being made global (i) by the active dissemination of practices, values, technology and other human products throughout the globe (ii) when global practices and so on exercise an increasing influence over people’s lives (iii) when the globe serves as a focus for, or a premise in shaping, human activities.<sup>236</sup>
- A process (or set of processes) which embodies a transformation in the spatial organisation of social relations and transactions, expressed in transcontinental or inter-regional flows and networks of activity, interaction and power.<sup>237</sup>

Many authors write about fervent theoretical and ideological discussions and debates of rivalling concepts about globalization itself, its understanding and character. Some see globaliza-

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<sup>232</sup> Jain Neeraj, *Globalisation or Recolonisation* (Pune: Elgar, 2001), 6-7.

<sup>233</sup> Roland Robertson, *Globalization* (London: Sage, 1992), 8.

<sup>234</sup> Malcolm Waters, *Globalization* (London: Routledge, 1995), 3.

<sup>235</sup> Anthony Giddens, *The Consequences of Modernity* (Cambridge: Polity, 1990), 64.

<sup>236</sup> Martin Albrow, *The Global Age* (Cambridge: Polity, 1996), 88.

<sup>237</sup> David Held, Anthony McGrew, David Goldblatt, and Jonathan Perraton, *Global Transformations: Politics, Economics and Culture* (Stanford, CA: Polity, 1999), 16.

tion as an embodiment of an ironclad historical inevitability, for others, it is only a large myth. Some assert that globalization is an objective and spontaneous planetary process, while their opponents view it exclusively as a scheme<sup>238</sup> for assuring Western domination – that is Americanization of the world. Further, some authors believe that globalization is a new and unique phenomenon in the history of humankind, and some see it as a process that has come to an end in the 20<sup>th</sup> century as capitalism<sup>239</sup> spread around the whole planet.

Some argue that globalization means the end of nation-states, whereas others insist that in the increasingly integrated world, the role of nation-states will become even more important. On the one hand, we hear that cultural homogenization is an inevitable outcome of globalization, on the other, that the interactions caused by globalization will create a new cultural diversity. While for one line of thought it signifies the integration of the world, for others it inevitably causes fragmentation, deepening of the social gap between worlds and ultimately a clash of civilizations. If the winners in globalization see exclusively a civilization progress and added benefits for humanity, for losers it is but a destructive force.

When speaking about different elements of globalization, Ulrich Beck<sup>240</sup> finds two major approaches to its analysis. One encompasses authors such as Immanuel M. Wallerstein, James

<sup>238</sup> Even those who do agree that globalization is a project disagree on other points. Some hold that globalization is just a myth – a form without cognitive content – while others believe that it is an ideological project with real content supported by several influential groups.

<sup>239</sup> Douglas Kellner, following Max Horkheimer, asserts that it is possible to say that whoever speaks of capitalism must speak of globalization, and that it is not possible to theorize globalization without talking about re-structuring of capitalism. Douglas Kellner, "Theorizing Globalization," *Sociological Theory* 20, no. 3 (2002): 289. For more details see Zlatan Delić, Željko Kaluđerović, and Amra Nuhanović, "Kritika globaliziranog (neo) liberalnog kapitalizma i njegovih finansijskih institucija," *Pregled* LV, br. 2 (2014): 1-15.

<sup>240</sup> This importance of proper use of terms is well shown by Beck, who distinguishes between the terms 'globalism' on the one side, and 'globality' and 'globalization.' Ulrich Beck, *Was ist Globalisierung?* (Frankfurt am Main: Suhrkamp, 1998).

N. Rosenau, Gilpin, Held, Robertson and Arjun Appadurai who insist that there is one central logic of globalization; another consists of authors that suggest and use a set of interdependent elements as necessary to explain globalization. It would be difficult even to name all of these authors both due to constant changes in their positions and due to emphasizing particular elements of globalization.

In that respect, Beck made himself well known by highlighting the idea of risk in the context of the ecological dimension of globalization. Further, Robertson is one of the first authors to emphasize the cultural aspects of globalization. Martin Shaw points out war as the cause of globalization. Held, Rozenau and Gilpin, each in their own way, focus on the political sphere, while Susan Strange and Kenichi Ohmae, inter alia, pointed out the technological aspect of globalization. Besides stressing the importance of communicational technology, Appadurai speaks mostly about the influence of migration on the process of globalization. Leslie Sklair underscores capitalism, while George Soros emphasizes the role of financial markets. David Harvey speaks of the geographical element and Saskia Sassen of the urban one.<sup>241</sup>

One of the most significant authors who have contributed to a more comprehensive understanding of globalization is David Held.<sup>242</sup> I have already mentioned his definition of globalization and now I will add that globalization, according to Held, is characterized by four types of changes. Firstly, globalization encompasses the expansion of social, economic, and political activities beyond the boundaries of states, regions and

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<sup>241</sup> Consult Vladimir Vuletić, "Rivalski pristupi u izučavanju globalizacije," in *Aspekti globalizacije*, prir. Vladimir Pavićević, Vladimir Petrović, Ivana Pantelić, Milan Sitarski, Goran Milovanović (Beograd: BOŠ. Dosije, 2003), 57.

<sup>242</sup> According to Held there are four types of globalization: thick globalization, diffused globalization, expansive globalization and thin globalization. David Held, Anthony McGrew, David Goldblatt, and Jonathan Perraton, *Global Transformations: Politics, Economics and Culture* (Stanford, CA: Polity, 1999), 211-222.



continents. Secondly, it is characterized by the strengthening or increased significance of inter-connectedness and the flow of trade, goods, capital, as well as culture and people. Thirdly, globalization may correlate with the acceleration of global processes and interactions. Lastly, increased expansion, strengthening and acceleration of global interactions may correlate with their increasing influence on the fluidity of the boundaries between local and global events. To put it more simply, according to Held, globalization can be understood as extending, intensifying, accelerating and increasing the importance and influence of inter-connectedness among people around the world.<sup>243</sup>

Held's classification of the theorists on globalization as hyperglobalists, sceptics and transformationalists is certainly the most famous one, although it is just one of various concepts, theories or schools of thought. Since globalization is not a neutral term, each of these three schools of thought offers a different view of globalization, i.e. it tries to understand and explain this phenomenon in a diversified manner. In addition to being different from each other, each of the aforementioned perspectives also reflects a set of general arguments on globalization that deal with its conceptualization, its novum role in history, its implications on the power and position of states, its potential for democratization, as well as its historical achievements and intentions.

According to hyperglobalists, globalization mostly means entering a new era characterized by global capitalism, global governance and global citizenship. The difference between the present and the past is the existence of a global economy which transcends and unites the biggest economic regions in the world.<sup>244</sup> Through various descriptions of "manic capitalism,"

<sup>243</sup> For the opposing view, see Bryane Michael "Theorising the Politics of Globalisation: A Critique of Held *et al.*'s "Transformationalism,"" <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.198.9568&rep=rep1&type=pdf>. Michael finds this classification to be "inadequate."

<sup>244</sup> Consult Kenichi Ohmae, *The End of the Nation State* (New York: Free Press, 1995).

“turbo-capitalism” and “supra territorial capitalism,” these (hyper)globalists intend to understand the qualitative change in the spatial organization and dynamics within the realm of this new global capitalism. They see strategic economic activities as immanently removed from the boundaries of nation-states. Today, it is the capital in the hands of the largest world corporations and financial institutions that dictate the organization, location and distribution of economic power and goods – rather than the states.

Within the ranks of hyperglobalists, there is a significant normative disagreement between neoliberals who value the triumph of individualism and the free market, and radical activists – neo-Marxists – for whom globalization represents victory of cruel and exploitative global capitalism. Despite divergent ideological views, all hyperglobalists agree that globalization is primarily an economic phenomenon, that the world economy is more and more integrated, and that the need for global capital imposes appropriate economic discipline which, in turn, drives most governments to practice politics less as “the art of the possible,” but rather as “appropriate economic governance.”

Hyperglobalists, according to Held, admit that globalization continually deepens the gap between the losers<sup>245</sup> and winners in this new economy. However, according to the ambitious position of neoliberals, this does not necessarily mean that one side must lose a lot or even everything for the other side to gain as much. Some parts of states may lose in the game of globalization, but each of these states has competitive advantages which will come into play sooner or later in the field of open and fair competition in the global market. It appears that neoliberals do not want to acknowledge that global capitalism not only creates, but even purposely works on strengthening the structural forms of inequality, both within and between na-

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<sup>245</sup> Some authors view terrorism as a manifestation of the dark side of globalization, or as a radical expression of the losers in globalization – so-called globophobs.

tion-states. The neoliberal idea of the demolition of the social state and drastic narrowing of the economic power inevitably leads to malignant social consequences. Miroslav Pečujlić adds:

Contrary to social capitalism, the project of “welfare state” which simultaneously increases the wealth and distributes the welfare to all wider social strata, neo-liberal formula hastens the accumulation of wealth for a few, while increasing social inequality and leads to globalization of poverty... If we compare two historic periods: from 1960-1980 and 1980-2000, corresponding to the rule of two different economic models, all indicators of economic progress point in the same direction - the last two decades are characterized with slow, or no progress. This increasing social discrepancy does not exist only between the First and the Third world, but the ripples of the “new poverty” are felt within wealthy societies as well. “Black holes of globalization,” disenfranchised people and territories are found in every big city of the First world: ghettos in the U.S.’ communities of Northern Africans in France, and Japanese Zoseba areas. In these areas we find millions of homeless people, great deal of prostitution, criminal and drugs, sick and illiterate (M. Castells, p. 168).<sup>246</sup>

In economies without country borders the role of national governments is reduced to a little more than the transmission of global capital, or they serve just as intermediary institutions between increasingly powerful local, regional and global governance bodies. Globalization, according to hyperglobalists,

<sup>246</sup> See Miroslav Pečujlić, “Globalizacija-dva lika sveta,” in *Aspekti globalizacije*, prir. Vladimir Pavićević, Vladimir Petrović, Ivana Pantelić, Milan Sitarski, Goran Milovanović, trans. Željko Kaluđerović (Beograd: BOŠ. Dosije, 2003), 22-24.

means the end of the nation-state, it has deprived it of its autonomy and sovereignty. This erosion of power and importance of nation-states and old structures is happening within the framework and control of capitalism and new technologies. Existing multilateral institutions which dominate the world's economy, particularly G8, IMF, WB and WTO – mostly function by supporting the emerging “civilization of the global market.”

The increased importance of the regional and global governance institutions will certainly cause a decrease in the sovereignty and autonomy of nation-states. On the other hand, it will make it easier for people from different countries to cooperate, alongside the increase in the global infrastructure of communication and firm awareness on numerous common interests, regardless of the place of origin. According to hyperglobalists this should witness that the process of development of the “global citizenship” has started.<sup>247</sup>

In the context of the social structure, the transformation of the overall social relations takes place, which ultimately should result in the creation of a new global civilization. In the end, hyperglobalists agree that globalization, regardless of whether it is considered from a liberal or radical leftist perspective, represents the embodiment of the fundamental transformation of the “order of human action.”<sup>248</sup>

Information and media revolution,<sup>249</sup> together with its cultural products, reach beyond geographical borders and impact local cultural environments. Local horizons widen, and food,

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<sup>247</sup> Economic and political power, according to hyperglobalists, goes beyond the borders of states and nations, to the point at which these are just “transitional forms of financial institutions.” Consult Kenichi Ohmae, *The End of the Nation State* (New York: Free Press, 1995).

<sup>248</sup> See Martin Albrow, *The Impact of Globalization on Sociological Concepts: Community, Culture and Milieu* (New York, London: Routledge, 1996). According to many theoreticians Francis Fukuyama's image of the world, i.e. its overly optimistic announcement of the end of history, also should be understood as a hyper-globalistic thesis. Consult Francis Fukuyama, *The End of History and the Last Man* (London: Hamish Hamilton, 1992).

<sup>249</sup> See Dejan Donev and Željko Kaluđerović, “Etičke dileme u novim medijima,” *Media and Communication* III, Broj 5, (2016): 115-125.

entertainment and lifestyle preferences homogenize. The constant movement of images on TV screens (movies, TV series, shows, pop idols, so-called celebrities, even daily news) causes spiritual deterritorialization and creates a culture rich with global information. Simultaneous to this global development of mass culture, is the growth of cosmopolitan culture – the sense of openness towards the world and of being a citizen of the world – the feeling which transcends the local milieu.<sup>250</sup>

Sceptics, on the other hand, based on data on the flow of goods, services, capital and people in the last hundred years, argue that the current level of economic interdependence in the world does not historically represent any precedent.<sup>251</sup> In their view, we can talk less about globalization, because it necessarily implies a fully integrated global economy and more about an increased level of internationalization and interaction between predominantly national economies.<sup>252</sup> While sceptics argue that globalization is a myth, they fully rely on the economic concept of globalization, identifying it primarily with a perfectly integrated global market. Arguing that the current level of integration does not meet this “ideal” of full integration and that such integration is less distinctive than the one from the 19<sup>th</sup> century (the so-called era of the “golden standard,” sceptics assert that the “accomplishments” of the present day “globalization” to be

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<sup>250</sup> One thing that hyperglobalists do not acknowledge is that the process of “cultural deterioration” is not a balanced one. It impacts a relatively small percentage of the world’s population - the well-off class with high mobility - which testifies to the fact that this is indeed a process of westernizing the world. Most of the inhabitants of the Third World spend their time struggling to survive, rather than enjoying the luxuries of consumerism, such as cell phones and broadband internet. They are destined to live and die on the same territory and are trapped in what Zygmunt Bauman calls the “local cage.”

<sup>251</sup> David Gordon in his “The Global Economy: New Edifice or Crumbling Foundations,” *New Left Review* 168 (1988): 24-64, and Linda Weiss in her *The Myth of the Powerless State* (Ithaca: Cornell University Press, 1988) find that geographically speaking, when we compare present international economy with the one in the times of the great empires, we find the former to be significantly smaller than the latter.

<sup>252</sup> Consult Paul Hirst, Grahame Thompson, “Global Myths and National Policies,” *Renewal* 4, no 2 (1996): 57-65.

completely overstated. They further find hyperglobalists' views to be basically wrong and politically naïve in their underestimation of the power and endurance of national governments in their role as regulators of international economic activities. According to sceptics, the intensity of internationalization is not only beyond national control, but it depends on the regulatory power of the national government which enables and guarantees continual economic liberation.

If any conclusion can be drawn from the current socio-political situation, it is, according to sceptics, the fact that economic activity is subject to a kind of "regionalization,"<sup>253</sup> because the world economy predominantly takes place between the three major financial and trade blocs: Europe, Pacific region and North America.<sup>254</sup>

Also, sceptics are hesitant to accept the idea of internationalization as a new world order in which national governments do not play a key role. They point to the increasing importance of national governments in regulating and actively promoting of cross-border economic activities. Therefore, national governments are not victims of internationalization, but rather their leading force. Gilpin, for example, considers internationalization to be a side-effect of an Americanized multilateral economic order which, as a result of WWII, has since inspired the liberalization of national economies. Alex Callinicos<sup>255</sup> offers a different perspective when he interprets the current intensification of world trade and expansion of foreign investment as just another phase of Western imperialism, in which the national governments, being directly connected to monopoly capital, are deeply involved.

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<sup>253</sup> Sceptics see "globalization" and "regionalization" as contradictory concepts.

<sup>254</sup> This division is also called "triadization" and, according to sceptics, it manifests in almost all aspects of international relationships. For example, in the realm of global communications, most of the expensive optic fibre cables are running the lines of the "informational super highways" between North America, Europe and East Asia.

<sup>255</sup> Consult Alex Callinicos et al., *Marxism and the New Imperialism* (London: Bookmarks, London, 1994).

However, despite the differences in emphasizing of individual aspects, sceptics agree that no matter what drives internationalization, it does not decrease the gap between the rich North and the poor South. On the contrary, it causes greater economic marginalization of many countries which are euphemistically called “developing.” Just as the trade and investments between prosperous countries of the developed North grow, the exclusion and marginalization of the majority of remaining countries in the world increase.<sup>256</sup> Moreover, one can challenge the common belief that the new labour distribution pattern means deindustrialization of the North by means of multinational companies outsourcing their operations and thus industrializing the South. Allen and Thompson,<sup>257</sup> for example, destroy the “global corporation myth” by emphasizing the fact that foreign investments circulate and are exchanged mostly between the most developed countries and that most multinational companies are primarily a product of their countries and regions. Similarly, sceptics argue against the view that internationalization causes fundamental or at least significant restructuring of global economic relations. In this respect, their position is based on deeply rooted forms of inequality and strict hierarchy in the world’s economy which in terms of structure has not significantly changed in the past century.

According to many sceptics, deep inequality feeds various kinds of fundamentalism and volatile nationalism,<sup>258</sup> rather than creating a global civilization. Moreover, it fragments the world into civilizational blocs and cultural and ethnic enclaves. Samuel Huntington<sup>259</sup> pointed to the terrors of this new age:

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<sup>256</sup> See the chapter “V. Genetically Modified Crops: Great Hope or Great Deception.”

<sup>257</sup> Consult John Allen and Grahame Thompson, “Think Global, then Think again – Economic Globalization in Context,” *Area* 29, no. 3, (1997): 213-227.

<sup>258</sup> See Uros Prokic, “Contemporary Epistemology of Nationalism: Faltering Foundationalism Contrasted with Holistic Coherentism,” *Conatus – Journal of Philosophy* 8, no. 1 (2023): 285-302

<sup>259</sup> See Samuel Huntington, *The Clash of Civilizations* (New York: Simon and Schuster, 1996).



international and civil wars, the strengthening of terrorism and various forms of organized crime. All of these contribute to the general sense of uncertainty of life. All of this he embraced in the well-known phrase on “clash of civilizations,” while Benjamin R. Barber,<sup>260</sup> similarly, speaks of the age of the “lesser evil” in which one must choose between two evils that he symbolically called the McWorld and Jihad. Herby, contrasts the homogeneity and commercial tendencies of the global economy and culture with traditional cultures which often resist globalization processes. Friedman<sup>261</sup> uses a seemingly more benevolent distinction between Lexus and the olive tree. Lexus is a car manufactured by the famous Japanese car manufacturer Toyota that symbolizes modernization, wealth, luxuries and consumer mentality of the West, while the olive tree stands for tradition and stable communities. Deepening of global inequality, true politics of international relations and “clash of civilizations,” point to the deceiving nature of “global governance” to such an extent that the governing of the world order predominately remains, as it has been for the past hundred years, in the hands of Western countries. With that in mind, sceptics understand “global governance” and economic internationalization as mostly Western projects whose main purpose is to maintain the domination of the West in world business. The deciding factor of the international order, therefore, is not interdependence, but dependence.<sup>262</sup> In sceptic’s footsteps, one may say that “international order” and “international solidarity”<sup>263</sup> will remain

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<sup>260</sup> Consult Benjamin R. Barber, *Jihad vs. McWorld, How Globalism and Tribalism Are Reshaping the World* (New York: Ballantine Books, 1995).

<sup>261</sup> See Thomas L. Friedman, *The Lexus and the Olive Tree* (New York: Farrar, Straus and Giroux, 1999).

<sup>262</sup> The solution for this authoritarian outlook on globalization is not isolation or anti-globalization fundamentalism. The future doesn’t consist of self-sustainable national economies, super-technology should not be viewed as a priori evil, and national culture should not be fully preserved. It is not true that progress is possible only if we radically part from the emerging global order.

<sup>263</sup> The relative character of “international solidarity” is well shown in the seemingly sur-

the slogans of those who see themselves as powerful enough to impose these onto others.

Concepts of cultural homogenization and global culture are also just advanced and masked myths which are easily destroyed by sceptics' arguments. One can easily detect the Western drive for cultural hegemony, for creating a monoculture, absolute uniformity and standardization of lifestyles and for the destruction of all other versions and ways of life. It is more precise to speak of Americanization – Mecedonaldization and Cocacol(oni)zation of culture – rather than Westernization. According to sceptics, we should say that just as much as deeply inaccurate and counterproductive is the thesis of hyperglobalists about the death of a nation-state and sovereignty in the political sphere, equally untrue and harmful is their prediction of the death of national, and local cultures, as incurably parochial and conservative, i.e. as archaic remnants of the distant past.

Finally, offering a specific solution to these somewhat opposing and different views, are the authors who see globalization as a real process, but also a complex phenomenon full of contradictions. These, we may say, are today's mainstream. Transformationalists hold that globalization is the moving force behind social, political and economic changes that affect modern societies and the entire global order. The current process of globalization, according to them, is new to humankind and it is up to communities and governments worldwide to find ways to adapt to the new reality characterized by vague boundaries between international and national, i.e. foreign and internal affairs. According to Rosenau,<sup>264</sup> an increase in “inter-domestic” affairs sets “new boundaries,” and expansion of political, economic and social space in which the destiny of communities and so-

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prising fact that the help for the “developing countries” has been declining for the past few decades to the point of being four times less than ever before.

<sup>264</sup> Consult James N. Rosenau, *Along the Domestic-foreign Frontier* (Cambridge: Cambridge University Press, 1997).

cieties is being shaped. Globalization, therefore, is a powerful force aimed towards the transformation of the world and is responsible for massive and radical reorganization of societies, economies, governing institutions, as well as the world order.

Nevertheless, the direction of this reorganization is not pre-determined since globalization is understood as an intrinsically unpredictable process. In other words, globalization is an open and dynamic concept without a clear direction and with no established techniques for the transformation of the world. Unlike hyperglobalists and sceptics, transformationalists demand no particular course of globalization and do not judge existing trends according to a particular fixed ideal of a globalized world. They rather see globalization as a long-term historical process marked with contradictions and influenced by many factors.

The caution of the transformationalists about the very future of globalization is expressed due to the belief that modern modalities of global economic, political, cultural, technological, military, ecological and migratory flows are hardly predictable and cannot be compared with any other period in human history. The deep connectedness of the world into one entity is not seen by them as proof of convergence or of the forthcoming emergence of a single, unified global society. To the contrary, transformationalists see globalization as related to new forms of global stratification within which some countries, societies or communities are becoming more interlaced and connected to form a single global order, whereas others are more and more marginalized. To speak of the North-South split, or the division between the First and the Third World means to overlook how globalization transforms traditional modes of establishing and disestablishing relationships between countries while creating a new hierarchy of power in the whole world. Transformationalists think that we should not speak of the social structure pyramid anymore – with the elite on the top, and bigger and

more numerous classes as we go down the line on the bottom – but rather about a three-layered format that resembles the image of concentric circles. Each circle in this scheme surpasses national boundaries as the first one represents the elite, the next so-called “the content” and the third one the marginalized population.<sup>265</sup>

The transformation of the forms of global stratification is closely connected with the growing deterioration of economic activities, among others, just as production and financial transactions are becoming more and more global and transnational. Transformationalists hold that national economies are being transformed through the process of economic globalization in the degree that national economic space simply does not coincide with national and state boundaries. In such a globalized economy these systems of production that transcend the boundaries of states, trade and financial transactions are even more tightly connected than some traditional values which connect communities and people on different continents.

Contemporary globalization, according to transformationalists, reconstructs or “redesigns” the power, function and authority of national governments. Although they do not question governments’ right to effectively control what is happening on its territory, transformationalists believe that the competence of international institutions, as well as obligations arising from the norms of international law can, to a certain extent, correspond to the usual understanding of sovereignty and integrity. This is obvious in many transnational organizations like ASEAN, NAFTA, OPEC, OECD, WTO and EU. In the European Union, for example, there is coexistence and simultaneous functioning of national governments, regional and local assemblies, as well as decisions and norms passed in the centre of this organization. Delegation of responsibilities and their supplementation enables

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<sup>265</sup> See Ankie M. M. Hoogvelt, *Globalisation and the Postcolonial World: The New Political Economy of Development* (London: Macmillan, 1997).

many European citizens to have a second capital city (Brussels) in addition to their own and that is not merely symbolic. In these new circumstances, the concept of the nation-state as an independent, autonomous and self-sufficient unit is more and more just an echo of the past and less an image of a reality in any of modern states. Globalization is, according to transformationalists, connected with reconceptualization, transformation or differentiation of the relationship between sovereignty, territorial integrity and power of a country.<sup>266</sup>

Claiming that globalization transforms or reconstitutes the power and authority of national governments, the transformationalists reject the hyperglobalists' thesis of the cessation of the sovereignty of national states, as well as the sceptics' view of the absence of any significant changes in the last decades. Instead of these, often to the extreme polarized viewpoints, the transformationalists simply think that the new model of sovereignty only suppresses the traditional concept of the state as an absolute, indivisible, territorially exclusive and complete form of public power. The contemporary concept of sovereignty according to them, should be understood "less as a territorially bounded space, and more as a political source of negotiation characterized by complex transnational networks."<sup>267</sup>

This, of course, does not mean that state borders no longer have any political, military or symbolic function or significance, but the recognition that their consideration as the primary spatial points of reference of modern life signifies that they can be relativized in an era of ever more intensifying globalization. Transformationalists believe that globalization has to do not only with new modes of sovereignty but also with the emer-

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<sup>266</sup> Of course, there are countries – the most powerful ones – which did not change their idea of sovereignty. They most often simply ignore newly established rules and institutions.

<sup>267</sup> Robert O. Keohane, "Hobbes's Dilemma and Institutional Change in World Politics: Sovereignty in International Society," in *Whose World Order? Uneven Globalization and the End of the Cold War*, eds. Hans-Henrik Holm and Georg Sorensen, 165-186 (Boulder, CO: Westview Press, 1995).

gence of powerful non-territorial forms of economic and political organizing at a global level, such as multinational corporations, transnational social movements, international regulatory agencies, etc. The world can no longer be considered exclusively as state-centric or as the one in which countries dominate because today the authority diffuses between public and private agencies at the local, national, regional and global level.

What this new order needs is to adjust the forms and roles of states, just as governance needs a coherent strategy for joining all the elements of the globalized world. Relevant strategies range from neoliberal models with minimal roles of states, developing models of states in which government promotes economic expansion and catalytic states in which government enables and facilitates joint operation. According to transformationalists, globalization does not mean the “death” of the state, but rather encourages an entire range of adaptive strategies and to a certain point enables a more effective one. Therefore, the power of national governments is not necessarily weakened by the process of globalization, but it is reconstructed and restructured to meet the needs of the complex governance structures in the increasingly interconnected world.

A specific indirect transformationalists’ view is obvious in the new terms which were created to describe the content of present globalization. Antithesis globalization-localization is synthesized in the term glocalization that stands mostly for interlacing the local content with global influences (Robertson). A resolution for the dispute regarding the crucial factors which are active in the modern world, in which some emphasize nation-states and others advocate transnational organizations, is sought by so called post- international era of politics. When it comes to culture, the homeorganization-heteroginazation dichotomy is surmounted by the term hybridization of culture.<sup>268</sup>

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<sup>268</sup>The views of Held and other like-minded thinkers which were elaborated in this paper may be also found in their books and at the Global Transformations Website: <https://>

Adjustment of local societies to the new state of affairs is a number one item on the agenda for the 21<sup>st</sup> century which can be hardly ignored. Adjustment is a must, not only due to strong pressure from without, but also as it is a true need of each society, manner of overtaking and qualitative treatment of superior civilization heritage such as: modern technology, more efficient market economy, democratic forms of political life, human rights and broadening of local cultural horizon.

The need for democratization of the global order - transnational and supranational institutions, forms of government – is the other side of the same challenge: to create a decent “global society.” There are many groups and social movements, cultural, scientific, philosophical and political elites, that are driven by the dark side and risks of the authoritarian form of globalization to search for corrections and alternatives – “for different forms of mondialisation.” In the economic and social sphere, instead of the globalization of poverty, poverty alleviation, the reduction of gaps between societies, the write-off of debts to poor countries, the taxation of speculative financial capital and the introduction of a basic, minimum income for all citizens are required. Politically, we see the emergence of projects of cosmopolitan democracy anywhere from local participation of citizens, and regional collective decision-making (“collective,” “shared sovereignty”) to reformation of the UN and adoption of democratic global legislation. The tendency to change from a one-sided to a multisided global community is strong. Projects of cultural pluralism, mutual enrichment and interlacing of civilizations will replace the destruction of national culture as well as the clash of civilizations.

The epoch of the emergence of “global society” – global order – should not be reduced to the pro-contra dispute for globalization. The true conflict is about social nature and historical



form of globalization. What will be the form of globalization? Will it be the one more humane and more socially responsible, or less human and “more profitable” one? Democratic or authoritarian? After all, the resolution of the conflict on the dominant form of globalization will essentially decide the destiny of billions of ordinary people in the world.

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In recognition of his achievements, as well as for his significant contribution to the study of Ancient Greek philosophy and his dedicated efforts in fostering and strengthening academic ties between the Serbian and Greek philosophical communities, in June 2022 Željko Kaluđerović was awarded the honorary title *Doctor Honoris Causa* by the National and Kapodistrian University of Athens.







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