



News and Notices

An Important Step Forward

“Bioethical View on the Future of Agriculture in Europe” Conference

On 20 November 2012 an important meeting of bioethicists and other interested persons was held in Zagreb. A rather unusual event recorded in the history of bioethics in Croatia, with a group of rather different institutions signed as organizers: the Association of Bioethicists in Central Europe – BCE as the prime organizer, and as coorganizers Center of Bioethics at the Philosophical Theological Institute of the Society of Jesus and the Croatian Bioethics Society.

The topic of this international conference (being a part of the annual meeting of BCE-members) – “Bioethical View on the Future of Agriculture in Europe” – is of particular importance in the context of development and promotion of European Bioethics. This bioethical tradition goes back to its originator Fritz Jahr (involving also Albert Schweitzer as quite influential to this course of thought); it has strongly emphasized an interdependence of different life forms as a backbone of bioethical responsibility. In this sense, agriculture is an important area of reflection in the European bioethics, as a site of bio-technological intervention in the constitution of organisms, thereby in the entire ecosystem. An exceptional significance of this event (not only for Croatian academic establishment, but for the broader public, too) lies in two reasons: firstly, the topic is crucial for life and health of man and other species. Secondly, the fact is that the conference was coorganized and the topic was tackled by institutions and experts of essentially different disciplines, traditions and backgrounds. Once again an example of successful operation of the originally Croatian model of integrative bioethics and pluriperspectivism has been demonstrated.

The program was organized in three sequent sections: I Opening, II Bioethical Reflections on Agricultural Practice in Contemporary Europe and III Case-studies of Bioethical Challenges in Man’s Relation to Nature.

At the opening, an Assistant Prof. Katica Knezović, Ph.D., a member of the BCE-Presidency, first welcomed all those present at the Conference. The next welcoming address was given by Prof. Sigrid Müller, Ph.D, President of BCE and Dean of the Catholic Theological Faculty at the University of Vienna. Mrs. Müller, as a prominent theologian and ethicist, made an introduction with a short history of BCE. It was founded in 2007 and ever since then it has been organizing its annual meetings in different Central European cities; in 2008 in Austria (on the topic “Bioethics in Central and Eastern Europe”), in 2009 in Slovakia (“Biology Meeting Theology”), in 2010 in Poland (“Bioethical Dialogue in the Society”) and in 2011 in Hungary (“Suicide – from Social Taboo to Ethical Issue”). Having posed the question on the role of faith and moral

theology in bioethical reflection, Dr. Müller stated: “courage to act, courage to dream”. She briefly explained what dream is meant by that: “a dream of a world in which a good living will be provided to the next generation, too”.

Then the speech given by Monsignor Prof. Valentin Pozaić, Ph.D., SI, Auxiliary Bishop of Zagreb and Director of the Centre for Bioethics at the Society of Jesus’ Philosophical-Theological Institute followed. Pozaić recalled the fact that Catholic theologians were first to write on bioethical issues in Croatia; in 1984, two articles appeared in the Catholic newspaper *Glas Koncila*, entitled “Right to life” and “Right to death”; later on, two more articles on euthanasia were published in 1985. Pozaić introduced a short history of the Centre for Bioethics, saying that the years 1969 when the Hastings Center Report was founded in New York, and 1971 when The Kennedy Institute of Ethics was founded in Washington DC, were actually the two milestones which inspired the foundation of the Centre in Zagreb. On 29 September 1986, the Center was officially recognized. The objectives of the task-oriented Center have been promotion of the interdisciplinary research, confrontation of moral theology and life sciences, as well as deepening and applying biblical anthropology. Addressing the slogan from Pope John Paul II’s opening Encyclical (*Redemptor hominis*), namely that “the Church cannot abandon man”, Pozaić stressed that bioethics presents a loving care towards life in the surroundings of contemporary ethical relativism which leads to ethical anarchism. Treatment of a human life and any other life according to its peculiar dignity is a basic task and challenge to bioethics.

Afterwards, a very informative talk was given by President of Croatian Bioethics Society, Prof. Amir Muzur, Ph.D., from the Department for Social Sciences at the Medical School in Rijeka. In his speech, he focused in particular on identification of the European bioethics. Namely, up to fifteen years ago bioethics used to be referred to as an “American product”. However, in 1997, Rolf Löther discovered that the term ‘bioethics’ was not for the first time used by American biochemist Van Rensselaer Potter in 1970, as was generally held, but by the German Protestant theologian and pastor Fritz Jahr, already in 1927. Prof. Muzur briefly described Jahr’s conception of bioethics which is, notably, founded on the respect for all life forms.

The first section of lectures started with Prof. Günter Virt’s paper. Virt, a Professor Emeritus at the Catholic Theological Faculty in Vienna, is a member of the European Group for Ethics in Science and New Technologies at the European Commission since 2001. He presented a history and work structure of the Group: in 1991, a president of the European Commission required ethical counselling regarding fishing industry and doping. In 2009 the target of the counselling was nanomedicine, in 2010 the ethical aspect of biomedical research, whereas in 2011 it was an ethical view on ethical dimensions of communication technologies. The Group consists of fifteen members and works according to the principles of pluralism, multidisciplinary and independence towards political structures. However, the resulting document on a required topic must be a result of consensus. For instance, if an experts’ view on animals cloning or new agricultural technologies is required, a working subgroup would consist of an expert in ethical issues, in law issues and in such engineering technology. The basic principles of the Group’s operation are human dignity and justice, precisely intergenerational justice (equity), said Prof. Virt.

An integrating approach leads to solutions; several factors are taken into consideration – agricultural multifunctionality, social impacts of agriculture,

which is its effect on culture, food safety and environmental effects on agriculture. The importance of addressing the pleiotropic effects of gene modification was also stressed, since modification of one gene does cause multiple phenotypic effects. Eventually, the Group proposed several actions such as: reduction of chemicals in agriculture and optimal production. Professor Virt's attitude is that introduction of GM food must not be imposed on any country as long as its harmlessness in terms of health is not proved. Such judgment has been accepted by the European Commission, too. According to Virt, one should beware of monopolistic companies in agriculture. The suggestions of the Group to European Commission also involve: creating of the European bank of agricultural seeds and building a system of "lifelong observation" of products.

An author of the methodological framework of integrative bioethics and pluriperspectivism, Prof. Ante Čović, Ph.D., from the Department of Ethics at the Faculty of Philosophy and Social Sciences in Zagreb, presented a very systematic paper on "Founding Integrative Bioethics: Biotic Sovereignty as the Model of Establishing Responsibility towards Non-human Nature". Approaching the issue from the philosophical point of view, he firstly distinguished between two principles as guidelines of the two epochs – the Bacon's imperative to control nature and the bioethical imperative to preserve nature. Following the latter, an appropriate man's responsibility towards the living world is gradual, according to the hierarchy of the beings' characteristics, the so-called responsibility according to the sliding scale. Reflecting on the conditions that would enable a credible *Tierethik* (animal ethics), Čović argued that the so-called theoretical absolutism, which caused species levelling, is unsustainable.

Species levelling, holds Čović, has prevailed in contemporary animal ethics discussions, being detectable in two versions, namely in the Aesopian approach and in the Singerian approach. Both approaches, although starting from different points of view, hold that (some) human and (some) non-human beings share an equal moral status. Čović argues that such approaches not only have false starting points, but are counterproductive towards the destiny of non-human living beings. It is necessary, Čović points out, to affirm incontestable moral asymmetry, regarding man and other living beings. Only in a species perspective it is possible to give foundation to man's responsibility for other living beings – since man is responsible for them, but only if he is a moral subject, which other species are not. Thereby, human and non-human beings form an asymmetric moral community. Human and non-human living beings can have the same ranking as belonging to other types of communities (in pathocentric approach, all living beings equally belong to the sensitive community, in biocentric approach all living beings belong to the biotical community, and in physiocentric approach all living beings belong to the natural community); however, considering a moral community, this is not the case. The latter community indeed does give foundation to man's juridical and political responsibility towards animals. Concerning this fact, Čović referred to the *Lošinj Declaration of Biotic Sovereignty*, signed on 16 June 2004 by the round table discussion participants at the 3rd *Lošinj Days of Bioethics*:

"The concept of biotic sovereignty expresses autochthony as the supreme and inviolable principle of the self-preservation of a life community. Since man as a member of the political community is, at the same time, the sole responsible member of the biotical community, the responsibility of preserving biotical sovereignty is transferred to the political government."

Since, according to the quoted Declaration, “the introduction of exotic organisms directly and consciously denies biotic sovereignty“, the controversy of GMO in agriculture is related to man’s responsibility for non-human living beings. Čović underlined that it is our political and juridical duty to protect the animals’ biotic rights, bearing in mind that animals’ rights are a reflexion-derived notion. The legal subject is, in the strict sense of the word, only man, because beings that are not moral subjects cannot have a genuine moral value and a legal status. Since man is capable of responsibility, he has an ontic responsibility (towards individual living beings), philonic (towards the species) and theological responsibility (responsibility for a co-creating activity – which is performed whenever a constitution of living beings is affected). Hence, concludes Čović, Fritz Jahr’s bioethical imperative is valid: “Respect every living being and deal with him, if possible, as an end in itself!”

In the second session, conducted by the bioethicist Prof. Tonči Matulić, Ph.D., Dean of the Catholic Theological Faculty of the Zagreb University, the first lecture was given by Prof. Tajana Krička, Ph.D., Dean of the Agricultural Faculty, at the Zagreb University. The addressed topic corresponded to Dr. Krička’s specialty; she is an expert in the field of natural science: “Agriculture in Croatia now and then: Its influence to biomass and biofuel production”. As a natural scientist, Dr. Krička reinforced her statements with abundant statistics. The territory of Croatia is covered by 0.47/ hectare of arable grounds per capita which is quite a high percentage, ensuring that Republic of Croatia is a country suitable for agriculture. However, while in the ‘80s of the last century the Croatian agriculture was as productive as ever, in 1993 a decline occurred and the entire situation has only deteriorated; so today imports has by far left exports in agricultural products behind. That practically means that the Croatian contemporary agriculture is in a very bad condition. Since the lack of crude oil as a major energy resource is going to happen quite soon, a question that Dr. Krička discussed was how to implement a good energetic policy and bring forth sustainable agriculture. Biofuels are decent energy resource, which decrease the expenses; the first generation of biofuels is in fact food, that are already produced and the second generation are waste. Biomass coming from forestry, cultivated grounds and food industry waste are a fairly cost-effective source of energy, a potential of good land management. In addition to this, biomass as a by-product in livestock farming can be an equivalent to crude oil. The biomass refinement would create new jobs as well; whereas refining gas employs about 9 persons, biomass refinement employs even 135 workers. The final outcome pays out well.

Dr. Krička emphasized that well-judged treatment of nature in agriculture is management (which is not familiar to single-crop farming!), and no way an exploitation. She also mentioned some unpleasant facts from the ‘70s, which were prosperous years for agriculture in Croatia, some embarrassing facts that were kept secret from the public: since thoroughbred (first class) wheat could not be exported (because the market was overwhelmed with it), it got thrown into fish-ponds, as well as the surplus of vegetables got destroyed. It was a striking example of a considerable lack of solidarity.

The following lecture was held by Prof. Valerije Vrček, Ph.D., from the Institute for Organic Chemistry at the Zagreb Faculty of Pharmacy and Biochemistry, the author of two recently popular science books which mostly tackle agricultural issues and the health risks in applied chemistry. The topic of the lecture was a frequently presented subject by Dr. Vrček: “Chemical Outcome of Pesticides and Medicines in the Environment. Ecological Price

of Nourishment and Health”. The lecturer pointed out that, in fact, medicines and pesticides in our environment transform into new derivatives which are sometimes even more toxic than the initial compounds. “When debating on the ecological crisis’ symptoms, although scientific data are not the sole argument, they are indispensable”, Prof. Vrček said. He presented a few examples among which the most interesting seems to be this one: in 2004, a plague of Indian Gyps vulture (the vulture population in India declined by 99.9% by the year 2008) was proved to be caused by an uncontrolled and futile use of diclofenac in livestock industry. Nobody was sentenced for the damage; a sharp decline in the vulture population harmed the natural balance of predators and prey, biodiversity and even local religious Parsi rites which had been using the presence of vultures.

An aggressive implementation of medicals in our environment displays frailty of ecosystems in which all the components suffer harmful effects and consequences are often irreversible. Dr. Vrček’s reflections involve biological, chemical and ethical issues, bringing up the conclusion that the dark side of “consumerist paradise” is a serious threat to such values as biodiversity, health and fertility. The “a ton per hectare” ideology in agricultural production and the above mentioned phenomena have all the same denominator – excess. Thus we are confronted with a serious question, namely where the limits are – boundaries between a production that would meet the needs and a production that exposes us to degradation and threat. The answer is not easy to find, but some answers are expected from this meeting, too, said Dr. Vrček.

The last lecture was given by Assistant Prof. Katica Knezović, Ph.D., from Department of Philosophy and Social Sciences at the Teacher’s Education Faculty of the Zagreb University. Prof. Knezović, who got her first degrees in Agriculture and Theology, did her PhD in Moral Theology on the very subject of GMO, so the topic of her lecture was “Bioethical Controversy of GMO in European Agriculture”. The advantages that are usually attributed to GM crops are: resistance to herbicides, toleration of insects, enhanced traits in products and increased productivity. However, Knezović goes on: in USA (which is an exemplary market regarding GM food) there is no appropriate procedure which would examine the safety of GM crops and foods; therefore they are not being labelled, for they are allegedly “equivalent” to the ones that are produced in a conventional way. In addition to this, patents on plants and animals (like the famous Harvard “oncomouse”, for example) are legal, which is ethically speaking highly questionable. Although GMO in agriculture is frequently presented as a solution to world hunger, for a majority of the world population it does not work, said Dr. Knezović. She introduced a numerical formula to depict the present GMO situation: 2–4–5–6. It means that 2 genetic modifications of 4 key patented crops are possessed by 5 big companies and are being cultivated mostly in 6 countries of the world. Beside the negative GMO experiences of certain countries, these numbers illustrate monopolization of biotechnological and food production power.

As ethically negative aspects of GM-crops, Knezović took seven criteria into account: (1) allergies and toxicities in people, (2) creation of the resistant breeds of vermin, (3) monoculture and increased chemicalisation, (4) diminishing biodiversity, (5) loss of local knowledge that has been building up for centuries, (6) concentration of power in a few centres, and (7) focusing on finding only technical solutions to problems.

Although there are opposing views as well, Knezović considers adverse effects of GM-foods to human health as demonstrated. She pointed out, as

has already been said in other lectures, that in Europe there are many more precautions and principles of respecting the appointed procedures regarding GMO-policies, when compared to USA, Canada, Japan and other leading countries in GMO production. In such patents, springing out of ideas supporting the GMO, there is a huge risk to health, biodiversity and the balance of ecosystem. Namely, the central problem is that the animate and the inanimate is being treated in the same way. However, biology is much more complex than technology, Knezović concluded. After this very last lecture, a discussion started.

The importance of this bioethical event is reflected not only in the fact that “man must eat”, as Prof. Knezović simply said in her opening address, but also in a number of countries from which the participants at the Conference came (12 countries). The lectures showed a direction towards which a responsible treatment of the living being in agriculture should go, which ought to consider biological, medical, economic and social/cultural consequences of the actions. In a “market-driven” society in which food production is strongly motivated not only by a basic need but by profit of biotechnological mega-companies, its management is administrated by a market-driven logic, and in this way it is hard to find the solutions that are acceptable to all parties. This is, however, a reason more to look after such solutions through integrative and pluri-perspective methods. In that sense, this meeting was one more opportunity to confirm the originality of the European bioethics.

Marina Katinić