

vergences between Augustine's *City of God* and al-Farabi's *City of Virtue (Al madina al Fâdila)*. Also, virtue, about which Augustine has so much to say, is a very concrete issue for Muslims today. And finally, reconciling God's omnipotence and human free will and responsibility is a task equally important to Christians and Muslims and pertinent to our struggles with political differences and terrorism.

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BIOETHICS AND HEALTH CARE

Topic: Current Signs in Bioengineering
Convener: Regina Wolfe, Saint John's University, MN
Moderator: David F. Kelly, Duquesne University
Presenter: James J. Walter, Loyola Marymount University

In "The Bioengineering of Planet Earth: Some Scientific, Moral and Theological Consideration," James J. Walter addressed many of the challenges posed by bioengineering and biotechnology, providing an overview of the current state of bioengineering for generalists while simultaneously fostering substantive discussion among those involved in the field.

The first part of the paper provided an update on current trends in genetic bioengineering of plants, animals, and humans and pointed to several important ethical issues. Most genetic engineering projects involving plants fall into one of the following types: engineering for improved crop production; engineering for improved human health, such as edible vaccines; and biopharming, or engineering of plants for alternative nonfood use, such as chemical production. These efforts have met with mixed reactions globally, with greater acceptance in the United States and China, and with resistance in most of Europe (Switzerland being the exception). The benefits of bioengineering of plants include the potential of an abundance of grain production, more diverse and improved foods, crops that are less reliant on the use of chemicals, and transgenic plants that can become "biological factories" to produce drugs, such as interferon, for humans. Ethical concerns include unfair competition for small, privately owned organic farms; unknown environmental and safety issues, such as long-term risks to humans associated with eating transgenic plants or the spread of new viruses to surrounding crops; and questions surrounding the fair allocation of public funds for research.

In addressing animal genetic engineering, Walter focused on the modification of the genetic makeup of animals for human benefit and the creation of transgenic animals by using recombinant DNA (rDNA) modification. He

addressed two types of ethical issues connected with bioengineering of animals. The first relates to proposed benefits and potential risks. Among the benefits are the potential for increased food and fiber production and for increased economic growth as well as the potential for harvesting animal organs for human use. The potential risks are many and include concern for unanticipated consequences that may affect the changed animal; the potential narrowing of the gene pool of the animals; and the patenting of genetically engineered animals and the socioeconomic risks inherent in doing so. The second set of ethical concerns is related to the use of animals in research that is not for the benefit of animals but for the benefit humans. These concerns focus both on the pain and suffering inflicted on the animals and on questions about the ethics of patenting the transgenic life forms that are created.

Walter noted that questions about technologies with the capacity to alter or duplicate the genetic code of humans are perhaps the most contentious and morally problematic. In addition to basic questions of safety and effectiveness of these technologies, he addressed a few of the more important ethical issues. Among them are the following: people's privacy as regards their genetic code; the patenting of human genes; the moral status of the preimplantation embryo; and issues of social justice at the macro level of individual societies and of the global community.

The second part of the presentation focused on theological considerations. Here, Walter indicated that Christians' moral judgments about the genetic engineering of plants, animals, and humans are often informed by religious beliefs. He noted that varied understandings of what it means to be created in the image of God lead to different moral evaluations that range from understanding humans as stewards, who are not to intervene in God's creation but to care for it, to understanding humans as created cocreators, who are "both utterly dependent on God for [their] very existence and simultaneously responsible for creating the course of human history."

A second theological framework that has shaped the discussion of genetics and bioengineering centers around whether or not humans are "playing God" when they intervene in life at this fundamental level. The questions here focus on the status of human DNA (Is it sacred or not, and therefore, what limitations might exist on human manipulation and control?) and on God's sovereignty and divine ownership of creation (Will patenting human genes take away God's sovereign ownership of these materials?). Most theologians consider human DNA wondrous, but do not ascribe sacred status to it. They view it like other biological material as something that can be altered within moral limits.

Walter concluded by calling for a clear ethical agenda with which to confront the many challenges that will continue to arise as a result of advances in bioengineering and biotechnology. Among those arising from the bioengineering of humans are the following: protecting the dignity of research subjects, including the early embryo; protecting the privacy of genetic information; determining how to counsel patients when knowledge of genetic diseases

outstrips clinical ability to cure the disease; recognizing and responding to the possibility of discrimination arising out of genetic screening of targeted populations; and marketplace issues, particularly the profits that multinational pharmaceutical companies are inline to gain. A lively discussion followed.

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KARL RAHNER SOCIETY

- Topic: Karl Rahner and Religious Language
 Convener: Melvin E. Michalski, Saint Francis Seminary, Milwaukee
 Moderator: Craig A Baron, Duquesne University
 Presenters: Stephen Fields, Georgetown University
 Terrance Klein, St. John's University
 Ann R. Riggs, Rivier College

The presenters' ten-minute summaries of their papers, which had been made available in advance on the Society's web page (<www.theo.mu.edu/krs/>) provided for a lively discussion among 17 participants. The papers will be published in volume 15 of the Marquette University Journal, *Philosophy & Theology*.

Stephen Fields addressed the topic: "Rahner and the Symbolism of Language." For Fields, Rahner's metaphysics of language shows that language itself is intrinsically realsymbolic. By *Realsymbol* Fields means that all beings qua beings, as well as Being itself, are symbolic. Being is by its very nature expressive; it posits itself and thereby expresses itself. Just as the human person is realsymbolic, "because the soul emanates itself in and through the body, so language is realsymbolic, because it emanates itself in and through the signs, sounds, and characters that incarnate it." For Fields, Hegel's logic of unity-in-difference, that Rahner adapts in fashioning the realsymbol, is the crux of Rahner's genius as a metaphysician. Fields also stressed that in mediating Thomas Aquinas through Kant to Heidegger, Rahner advanced the philosophical potential of their thought.

Terrance Klein, addressing the topic: "Symbol and Religious Language," alleged that one must look at Pierre Rousselot, Joseph Marechal and Henri Bergson to understand Rahner. The key insight of Transcendental Thomism, according to Klein, is "not to concentrate upon the affirmations which our concepts might produce about God, but rather the recognition that language itself, the ability to grasp even the provisional essence in a known object, is only possible because that object reveals itself against an infinite horizon. In this