Biotechnology and the Human Good

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Advances in technology have been in tension with human personalism arguably since the Enlightenment, and certainly since the time of the Industrial Revolution, but at no time in human history has there been such a conflict between individual human nature and the techno-medical advances that may radically change that nature, or at least our perceptions of it, as there is at the present.

Developments in genetics and reproductive biology are part of what has defined this modern era, to use a phrase coined by Nigel Cameron, as the *biotech century*. The preface of *Biotechnology and the Human Good* presents the reader with an apt symbol of this through the example of Kevin Warwick. Mr. Warwick claims to be "the world's first cyborg: part human, part machine." He has installed technology into his own body that allows him to communicate directly with computers and the Internet, and so to lead a perpetually "connected" life.

Most of us have intuitions about this sort of thing, whether in our enthusiasm (or lack of it) for Kevin Warwick, or in our gut response to gene therapy, artificial intelligence, embryonic stem cell research, or nanotechnology. Such reactions are influenced by prior commitments to religion, natural law, philosophy, and ethics. Yet, some of our intuitions may be wrong. The authors claim that "part of the purpose of this book will be to test our intuitions about biotechnology" (ix). Testing our intuitions requires an interdisciplinary approach, which is why the project director (not listed as one of the authors) is C. Christopher Hook, a practicing hematologist and clinical ethicist, but the team includes other physicians, ethicists, theologians, and a lawyer.

Chapter 1 serves as an introduction to biotechnologies, and includes discussions of the Human Genome Project, reproduction, cybernetics, and nanotechnology. It asks some familiar questions about the ethics of all of this from a Christian perspective, including the specter of a new eugenics as well as concerns about enhancement and technological immortality. The chapter concludes with a series of questions that serve as an outline for the remaining five chapters, including: What is human nature? What is the nature of biotechnology? How should we evaluate biotechnologies?

Chapter 2, "Humanity and the Technological Narrative," points out that technologies are *teleological*, that is, they are purpose-driven and value-laden. As such, they can be directed at good or bad aims. This means, contrary to much prevailing thought, that a given technology can never be seen as an unqualified worthy goal in its own right. A lot depends on the "back story," or the foundation narrative that undergirds it. The chapter examines three possible narratives: the second-creation narrative, the recovery narrative, and the wilderness tale. It then develops a biblical-theological approach that the authors call "responsible technological stewardship." The need for this is highlighted by the danger posed by irresponsible innovation. The authors quote political scientist Steven Monsma:

"When human beings set themselves up as masters of their fate, they set themselves up not for an ascent to freedom, as they imagine, but for a descent into slavery." Responsible stewardship will help us to avoid that fate and to be accountable to future generations.

Chapter 3 looks at biotechnology in the light of competing worldviews and articulates three: philosophical naturalism, environmentalist biocentrism, and Christian theism. The authors rightly take philosophical naturalism to task for its genetic determinism and a bankrupt anthropology that sees human beings as no more than machines. They explore the weak warrant such a worldview has for metaphysical reflection, for moral responsibility, and for any grounding of human dignity.

Environmental biocentrism promotes an ethic wherein there is no fundamental difference between human beings and the biosphere in which they live. These lead to the odd sort of ethical conclusion of a Peter Singer, who holds that placing any intrinsic value on human beings as opposed to animals is a moral fault he calls "speciesism."

Over against the first two views is Christian theism, which combines a robust understanding of general revelation with the dominion mandate from Scripture. This view ascribes a high value to human beings who are created in God's image with dignity and purpose. Though this works well for the medico-technological emphasis of the entire book, this reviewer was disappointed that the authors distanced themselves so stridently from the environmental movement. At a time when secular philosophies and New Age spiritualist ideas have so dominated popular concepts of a "green planet," it seems that Christian theism has a lot more to offer. The authors might have done better to show how biblical values can undergird responsible stewardship of plant and animal biodiversity and conservationism in addition to the insights afforded to human biotechnology.

Two additional chapters address concerns regarding human dignity and biotechnological hubris, but perhaps the strongest section of the book comes in chapter 6: "Biotechnology, Human Enhancement, and the Ends of Medicine." The authors take a historical approach to the traditional purposes of medicine, going back to the Hippocratic tradition. These goals include the treatment of disease and the relief of suffering. They then define *enhancement*, which goes beyond the treatment of disease to "improve form or functioning beyond what is necessary to sustain or restore good health."

While acknowledging that it may be difficult to draw a fine line between treatment and enhancement, the authors present some excellent reasons for restraint of the latter. A focus on enhancement as a goal of biotechnology would create inequalities of distributive justice, a world of "haves and "have-nots." Such a society would fail to meet the minimum requirements for health, sanitation, water, and housing for the world's poor, instead investing vast resources on enhancement technologies for the privileged few.

An anthropology based on human reason "will always be incomplete without the insights of a faith commitment." Our humanity is more than our genes and more than our physical abilities or longevity. "Only in that final union with God, in a body glorified by the resurrection, can the insatiable hunger that drives humans to enhancement be satisfied."

The book succeeds well because of its interdisciplinary team of authors, which allows a nuanced approach from the perspectives of medicine, theology, and moral philosophy. Some additional examples and case studies might have improved its readability. Particularly valuable for the student is an extensive section of notes on each chapter (34 pages), with abundant references and technical comments, as well as a detailed index.

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Business Ethics and Corporate Social Responsibility

Duro Njavro and Kristijan Krkac (Editors)

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International conferences are a good opportunity for pooling the work of experts and making it available to the public by publishing a book or a monographic issue of a specialist journal. This book is apparently just that: the publication of the papers read at the international conference, Business Ethics and Corporate Social Responsibility, held in Zagreb on 3 June 2006.

However, it seems to me that this book seeks to be, above all, the declaration of a purpose, the mission of the Zagreb School of Economics and Management (ZSEM), a private school of higher education that "promotes high ethical and moral values in business, and responsibility toward mankind, society and nature, by fostering tolerance, dialogue and understanding differences" (4). Obviously, this goal is pursued through the school's courses and research (4, 7) and also by initiating a dialogue with outside experts. This is what this conference sought to achieve (7–8).

The book consists of fourteen chapters written by eighteen authors from eight countries, plus a brief introduction by Professor Norman Bowie. The book does not have any particular order, and the papers vary considerably in their approach and quality; it was not a scientific conference but rather an exchange of ideas to foster interest by faculty, students, and Croatian managers in business ethics (BE), and corporate social responsibility (CSR). Thus, it includes such varied subjects as green marketing, information security, corporate culture, investor relations, and ethics in the public sector, as well as, of course, the chapters that deal directly with BE and CSR. No attempt is made, therefore, to identify the potential reader: They could be professionals and teachers with a certain level of knowledge of the subject or students attending a BE/CSR course (although this is not a textbook).

As is logical, the book reflects many of the strengths and weaknesses of current debate on these subjects. For example, distinguishing among the variety of ethical stances (deontology, virtues, social contract, and so forth) taken is crucially important if only because their different concepts of the individual, society, and the organization are frequently incompatible. Yet, this type of collective work does not tackle this issue. Also typical of