

Design and Destiny:
Jewish and Christian Perspectives on Human Germline Modification
edited by Ronald Cole-Turner

MIT Press, 2008, paperback \$23.00
246 pages, bibliography and index, ISBN 978-0-262-53301-0

True human germ-line modification (HGM)—the modification of genes that can be transmitted to children—has not yet been achieved. However, the mere possibility of it has already generated much debate among bioethicists. This is not surprising, as the moral questions raised by HGM are linked to those associated with a number of other important current ethical dilemmas, including abortion, in vitro fertilization, and eugenics. Inevitably, of course, HGM touches upon one of the most fundamental moral questions of them all: what does it mean to be a human being?

In *Design and Destiny*, editor Ronald Cole-Turner, H. Parker Sharp Professor of Theology and Ethics at Pittsburgh Theological Seminary in Pennsylvania, has assembled seven contributions from philosophers and theologians of various religious backgrounds that discuss the ethics of HGM. Despite the subtitle, the book has only one chapter addressing Jewish bioethics; the rest are devoted to Christianity from the three major perspectives of Catholicism, Protestantism, and Orthodoxy.

The book is divided into nine chapters. In the introduction, Cole-Turner makes the case for the book, writing that “the technology is closer than many think” (3) and that “religion reminds us daily to do justice, to guard against new forms of discrimination and unfairness that might come from expansive powers, and to seek broad access to the benefit of technologically advanced medicine” (8). He then details some cautious endorsements of germ-line modification made by religious leaders, and

concludes with a helpful listing of pertinent terminology.

The book’s next chapter, “Judaism and Germline Modification,” by Elliot N. Dorff, Sol and Anne Dorff Distinguished Service Professor of Philosophy at the University of Judaism in Los Angeles, introduces the problem in the context of Jewish sources of authority, namely, the Torah and its modern interpretations. It further clarifies differences between Orthodox, Conservative, and Reformed Judaism, although the chapter itself is written from the perspective of a Conservative Jew. The text then moves to a discussion of major Jewish principles that influence medical ethics, including God’s ownership of our bodies, the nature of the individual, and the call to *tikkun olam*, fixing the world. Dorff concludes with an analysis of five passages from the Jewish scriptures that are relevant to medical modification. For example, he examines the Torah prohibition of the use of magic and asks, “What is the line distinguishing magic from permitted and even mandated human interventions intended to fix the world?” (42). The chapter ends without any clear guidelines for HGM. Instead, Dorff concludes with a moral exhortation: “May we be moral and wise enough to learn from our traditions how to protect ourselves from our selfish and destructive instincts and how to maximize instead our altruistic and constructive abilities in this new world of genetic challenges and hope” (46).

The third chapter, by Thomas A. Shannon, professor emeritus at Worcester Polytechnic Institute in Massachusetts, explains the

teachings of the magisterium of the Catholic Church and is one of the more accessible chapters of the book. In a clear and understandable manner, it explains the Church's position on general bioethical issues, starting from a bedrock principle of Catholic teaching: "From the moment of conception, the life of every human being is to be respected in an absolute way" (54). Shannon then moves to a discussion of what constitutes permissible research. According to Shannon, to be permissible, research must respect the life of the human being by operating within boundaries of acceptable risk, it must be for therapeutic benefit, and it must contain potential for wider benefit to others. In opposition to the magisterium, Shannon calls for research involving the destruction of the human embryo, which he calls a "pre-personal" entity. His erroneous position is grounded in an outdated science that does not take into account the recent discoveries of systems biology.

The Orthodox Christian perspective is brought to bear on the matter of HGM in the fourth chapter, "A Traditional Christian Reflection on Reengineering Human Nature," by H. Tristram Engelhardt Jr., professor of philosophy at Rice University in Houston. This contribution is somewhat difficult to wade through, because Engelhardt spends too much time justifying his own branch of Christianity. When he finally ventures into the realm of bioethics, he delivers warnings similar to those of the previous chapter, emphasizing the importance of preserving created human nature.

The only chapter to completely oppose HGM, "Germline Gene Modification and the Human Condition before God," is by Nigel M. de S. Cameron, president of the Institute on Biotechnology and the Human Future at the Illinois Institute of Technology in Chicago, and Amy Michelle DeBaets, a PhD candidate at Emory University in Atlanta. They propose forbidding such intervention because "all efforts at the enhancement of human nature—with enhancement defined in terms of a break with the human analogy—are theologically excluded since they have the effect of reshaping that human

nature that is both God given and God taken" (105). Both authors recognize the essential distinction between therapeutic interventions and enhancement modifications, but then go on to reject the proposal that the two can be properly distinguished and that the eugenic uses of HGM can be prevented. They go on to warn against committing again the sin of Babel, that is, asserting our independence of God and using technology to create a "transhuman." The chapter closes with a call to the Christian responsibility "to care for those who are in need, including those who have genetic structures we would consider to be defects" (114).

In "Human Germline Therapy: Proper Human Responsibility or Playing God?" James J. Walter, Austin and Ann O'Malley - Professor of Bioethics at Loyola Marymount University in Los Angeles, wants to show that the moral judgments that religious believers hold regarding HGM are theological and not philosophical in origin, and to determine whether HGM really involves our playing God. He examines six central themes that inform moral reasoning on genetic manipulation from the official perspective of the Catholic Church—respect for the natural law, stewardship, the interdependence of the human body and spirit, informed consent, the common good, and therapeutic (as opposed to eugenic or enhancement) purposes. He then explores five major doctrines of Christianity—Creation, the Fall, the Incarnation, Redemption, and eschatology—to apply them to the debate over HGM. Walters concludes that HGM therapies "are not in principle as a goal fundamentally contrary to God's creative and redemptive purposes" (137). Rather, according to Walters, engaging in HGM could be an invitation to act as a co-creator and a co-redeemer, a participant in God's redemptive activities toward humanity.

"Germline Genetics, Human Nature, and Social Ethics," by Lisa Sowle Cahill, the J. Donald Monan Professor of Theology at Boston College, invigorates this collection by examining the social effects of HGM. Thus for Cahill, the acceptable use of HGM has to be "subjected to criteria of social well-being

and equity” (149). Not surprisingly, she puts the debate over HGM within the context of other social debates involving medicine, especially the debates over access to adequate health care and the inadequate attention given to health issues that affect developing countries. Cahill is rightly concerned that the poor and the marginalized will not have access to any of the benefits that could come with HGM: “The current behavior of drug companies, researchers, providers, and consumers is a good indicator of how access to and use of new genetic treatments, including germ-line technologies, are likely to be institutionalized in the future.” (161)

Next, Celia Deane-Drummond, of the University of Chester in the United Kingdom, responds to the question of HGM—what she calls inherited genetic modification (IGM)—by exploring the virtues that we as individuals and as a society would need to prudently move forward with this technology. She suggests that we especially need the virtues of wisdom and prudence for this task of discerning how far we should proceed: “In matters of such fundamental importance as IGM, a degree of consensus needs to be reached by a community as to whether a particular action is justifiable and how far it is justifiable” (186). In the end, Deane-Drummond cannot, in principle, rule out IGM. However, she does rule out human cloning as a means to achieve IGM, because “the human embryo clearly becomes a means to achieving an end, namely, the cloning of another human being” (193). Given this conclusion, it is surprising that she endorses the use of “unviable spare IVF embryos to generate stem cells for treatment of disease” (193). Is this not another instance of using the human embryo as a means to achieving an end?

The final chapter, by Cole-Turner, is a fitting end to this collection of perspectives. In a coherent and concise essay, he summarizes the arguments for and against HGM. He notes that the religious contributors of *Design and Destiny* tend to support some form of HGM as long as several constraints are respected. Helpfully, Cole-Turner lists the four conditions that, in his view, limit religious approval for HGM: avoid unacceptable levels of risk, avoid harm to human embryos, avoid increasing injustice, and avoid enhancement. Despite this universal call for caution, however, Cole-Turner also concludes—morbidly—that HGM technology is inevitable and that it will bring with it unwanted realities, including designer babies, distortions of human relationships, devaluation of the lives of diseased or disabled people, and the creation of “technologized” people who may be feared and envied as superhumans.

Religious voices have a legitimate place in the secular square. This volume brings together a rich tapestry of essays that illustrate well the diversity of religious voices engaged in the debate over HGM. As Cole-Turner points out, it is striking that these religious traditions generally affirm the therapeutic value of HGM. Together the essays reward the reader with a comprehensive understanding of the various issues at play in this important and ongoing conversation in bioethics.

ERIK GRAVEL

REV. NICANOR PIER GIORGIO AUSTRIACO, OP

Erik Gravel is a senior majoring in biology and history at Providence College in Rhode Island, and Rev. Nicanor Austriaco, OP, PhD, STL, is an assistant professor of biology and instructor of theology there.