

¹Scott C. Brown and Fergus I. M. Craik, "Encoding and Retrieval of Information," in *The Oxford Handbook of Memory*, ed. Endel Tulving and Fergus I. M. Craik (Oxford University Press, 2000), 93–107.

²Ronald A. Rensink, J. Kevin O'Regan, and James J. Clark, "To See or Not To See: The Need for Attention to Perceive Changes in Scenes," *Psychological Science* 8.5 (September 1997): 372.

***Biotechnology:
Our Future as Human Beings and Citizens***
edited by Sean D. Sutton

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Four of the seven essays in this volume are drawn from a 2004–2005 lecture series at Rochester Institute of Technology. The authors bring a variety of approaches to their common subject matter and display deep disagreement as to what deserves attention—disagreement that reflects somewhat the unsettled character of this important field of bioethics. According to the editor, three essays urge caution, three present an optimistic case, and one essay (by Larry Arnhart) cuts across the divide. The essays do not exhibit a high degree of coordination; only Richard Sherlock engages other essays as they are found in this volume. Still, Leon Kass in his various writings serves as a kind of focal point for several authors, usually as a target of criticism. Without being a comprehensive introduction, this book does provide the basis for a dialectical treatment of some fundamental moral issues in biotechnology.

Leon Kass contributed "Biotechnology and Our Human Future," which previously appeared in an almost identical form in 2003 under the title, "Ageless Bodies and Happy Souls" (*The New Atlantis*, Spring 2003). The fact that several authors in this volume cite the earlier version (as if they did not know it would be included in this volume) testifies to its reference-point status. The latter title more effectively points to Kass's focus on perfected bodies and satisfied souls as relatively uncontroversial targets of existing human desires and on what might happen if these targets were pursued more or less

effectively through biotechnology rather than imperfectly through human striving. If happiness consists in something like the polished exercise of natural powers, the biotechnical substitute looks more like a flattened human life, in which nobody cherishes what everyone enjoys without effort. Kass attributes the lack of controversy over these goals to thoughtlessness about what our desires mean. Even if it is not true that everything natural is simply good, he argues, there is something worth preserving in the natural arc and structure of human life.

Ronald Bailey displays an ambiguous posture toward this last thesis in his nearly unqualified enthusiasm for biotechnical innovation. In "Who's Afraid of Posthumanity?" Bailey cheerily mocks the fears of right-leaning critics (like Kass) and left-leaning critics (like Jeremy Rifkin) and defends the pursuit of biotechnical "miracles." He dismisses those (like Arthur Caplan) who even *question* the goodness of biotechnology. Because he sees "no moral objection to genetic enhancements" (and, apparently, no difficulty in recognizing an enhancement), he finds his opponents not only fearful but also "absurd." They support "fatalistic acceptance of the manifold cruelties randomly meted out by nature." He sees pre-implantation genetic diagnosis, for example, as expressing medicine's traditional aspiration to "cure and prevent" disease and as possibly useful for "conferring general benefits that any child would want to have." As we remove defects here and add

enhancements there, we make lives “longer, healthier, smarter, and perhaps even happier.” Perhaps, yes, but a *longer* life is good only on the presupposition that life itself is good. To presuppose this is to capitulate to the thesis of Bailey’s opponents: some interventions might diminish the good we already have. Bailey rejects this and feels confident that the baby will not be lost with the bathwater; Kass urges us to hesitate before discarding even the bathwater.

Ronald Green (“Bioethics and Human Betterment”) sees the new biotechnology as the means by which the medical successes of the last century will be continued and surpassed in the next. “All this can happen if we permit scientists to follow their dreams” and if we continue not to take seriously Kass and his “council’s counsels of despair.” Green focuses on germ-line genetic enhancement, and argues that it is “morally appropriate” that we continue to shape our own evolution and seek “at least some humanly chosen and inheritable improvements.” If the benefits are clear and the risks are contained, it is “far from obvious” that such enhancement is morally wrong. He reviews six standard sorts of objections, in each of which he acknowledges some relevant concern, but none decisively limits his optimism or his confidence that we can contain the risks. He concedes that for non-disease-related enhancements, the burden of proof should be on those who propose to use the new type of intervention.

In “Biotechnology in a World of Spiritual Beliefs,” Lee Silver writes, “Biotechnology provides the greatest hope for alleviating human suffering and, simultaneously, sustaining a vibrant biosphere.” The religiously minded might see in this an attempt to replace theological answers to human suffering with a man-made solution. That would not be entirely mistaken or entirely accurate. Where Kass tries to spell out how the new biotechnology is really new, Silver tries to show that it is continuous with the emergence of human civilization. The invention of agriculture and the domestication of animals introduced genetic modifications

into countless species. Biotechnology’s continued progress in the West is now threatened by various religious beliefs (he mentions conservative Christianity and New Age secularism). Eastern spiritual traditions, he says, are more amenable. Silver paints with a broad brush, arguing that Europeans tend to reject genetically modified crops because their post-Christian beliefs incline them to revere material nature. By contrast, he claims, most Asian religious traditions lack any providential order that man can violate, and they emphasize the permanence of the soul despite defects in the body. Thus, their religious heritage renders them receptive to all forms of biotechnology. Dominant Western spiritual traditions threaten us; biotechnology does not.

Hava Tirosh-Samuelson (“Jewish Philosophy, Human Dignity, and the New Genetics”) contrasts Kass’s cautious attitude with the more enthusiastic embrace of biotechnology by most Jewish jurists and medical ethicists, along with the state of Israel and Conservative, Reformed, and Orthodox authorities. She traces the latter near-unanimity to theological emphasis on the divine commands to procreate and to alleviate suffering, on the one hand, and, on the other, to Jewish demographics, where a declining birth rate exacerbates the consequences of the Holocaust. Embracing new fertility technologies raises problems of its own. Is Jewishness transmitted through a Jewish ovum or through gestation within a Jewish womb? While genetics inclines one to locate Jewishness in the body, the Jewish philosophical tradition suggests that humanness and Jewishness reside in the soul, in being in the image of God. She examines the notion of “image of God” according to Philo of Alexandria, Maimonides, Joseph Dov Soloveitchik, and Hans Jonas. The goal of the essay is, apparently, to support Kass-style arguments about the meaning of biotechnology from within the Jewish philosophical tradition, as distinct from the halachic legal tradition. (A clearer account of what makes *philosophy* Jewish would be welcome.) The Jewish philosophic tradition includes voices counseling humility or caution before bio-

technology. She makes these points most substantively in her treatment of Hans Jonas, the only author to address biotechnology specifically.

In "The Bible and Biotechnology," Arnhart argues that human beings have a natural moral sense produced by their evolutionary history. Some twenty natural desires constitute the core of that moral sense, and this makes it unnecessary to appeal to theological sources for moral guidance. Indeed, any allegedly revealed moral teaching must be judged for its goodness against our natural moral sense. Arnhart's primary target is Kass, not for his writings on biotechnology, but for his biblical interpretation. The bulk of Arnhart's essay concentrates on devaluing the Bible relative to our evolutionary moral endowment. On this view, the goal of morality is the "goal" of evolution: survival and reproduction. Arnhart treats the Bible, and he presents Kass as treating the Bible, in what might be called a fundamentalist fashion. (See Richard Sherlock's essay for some of the difficulties with Arnhart's reading.) He seems to think he has scored a rhetorical point when he finds Pope John Paul II conceding that the Bible does not explicitly address abortion. Arnhart rejects the Bible for not being an unambiguous articulation of moral wisdom, but he does not provide an example of any book that is. By showing that there are divergent interpretations of the Bible, he takes himself to have established that there is no moral teaching of the Bible.

A central component of Arnhart's argument is the claim that a biotechnologically induced posthumanity is impossible. The biotechnology that *is* possible will be contrived to serve existing human desires, and so it will not lead beyond human things. Thus, he "cuts across the divide" because he endorses the new technology but sees it as inherently morally contained. In "A Transcendent Vision," Richard Sherlock takes issue with this in order to argue that theology is indispensable to the public debate about biotechnology. Because nature can be altered by existing technologies in small ways, we have reason to expect that more consequential

"redesign" alterations may also be possible. Contemporary evolutionary theory would seem to support Sherlock, at least insofar as accidental genetic modifications are said to be the source of new species. Sherlock notes that nature and what is natural are not without qualification simply good. Once we begin to think of any sort of "enhancement," we are implicitly relying on some inherently controversial standard of the good that differs from what is merely given, and so we can no longer appeal to nature alone for guidance. (The difference between nature understood as the given and nature understood as the perfection or fulfillment of something is insufficiently addressed.) Sherlock, who thinks we must turn to theology (or "transnaturalism"), makes his argument with helpful criticisms of the papers by Green and Arnhart. Sherlock's case is weakened by his specific view of theology as an effort to articulate "a coherent set of communal beliefs," as opposed to a set of beliefs that correspond to some mind-independent reality (to which, he says, we have no direct access). Thus, the standards his theology would bring to biotechnology are those that *cohere* with his Christian faith, the highest moral precept of which is essentially humanitarian. In the final portion of his essay, he addresses the role of such theology in public deliberations. When he concludes that the proper goal of believers is the *moral* conversion of their fellow citizens, many will see this as attempted imposition of a sectarian morality into public life.

In Lucretius's *De rerum natura*, it is ambiguous whether corn is a gift of the gods or an invention of human beings. Silver leaves no doubt: corn is the fruit of early human biotechnology, by which we transformed what Locke calls nature's "almost worthless" materials into something of genuine utility. The relation between contemporary biotechnology and theology (variously understood) is not the explicit theme of this collection, but it does recur. A similarly recurrent theme is the difference between taking one's orientation by an understanding of the good to be pursued and doing so by reference to evils to be shunned or eradicated. Readers

who are already familiar with the difference between Baconian humanitarianism and Christian charity as traditionally understood (see Benedict XVI's *Spe salvi*) will be well positioned to benefit from the essays in this collection. While undergraduates could read each of these essays, an experienced teacher is needed to make more explicit the deepest issues at stake.

Typographical errors are rare and insignificant, except perhaps for the failure to indicate properly Kass's quotation of Michael Sandel on page 18.

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Books Received

Blood Money: The Business of Abortion (DVD), directed by David Kyle. TAH Film, 2010.

The Cambridge Companion to Science and Religion, ed. Peter Harrison. Cambridge Companions to Religion series. Cambridge University Press, 2010.

Catholic Controversies: Understanding Church Teachings and Events in History, ed. Stephen Gabriel. Moorings Press, 2010.

Changing Human Nature: Ecology, Ethics, Genes, and God, James C. Peterson. Wm. B. Eerdmans Publishing, 2010.

Death and Mortality in Contemporary Philosophy, Bernard Schumacher. Cambridge University Press, 2010.

Edith Cavell, Diana Souhami. Quercus, 2010.

The Ethics of Abortion: Women's Rights, Human Life, and the Question of Justice, Christopher Kaczor. Routledge, 2010.

Heart Sounds: Twelve Catholic Doctors, Janice Steinhagen and John Howland, MD. St. Luke's Books, 2010.

The Jurisprudence of Marriage and Other Intimate Relationships, ed. Scott Fitz-

Gibbon, Lynn D. Wardle, and A. Scott Loveless. William S. Hein & Co., 2010.

Methods in Medical Ethics, 2nd ed., ed. Jeremy Sugarman, MD, and Daniel P. Sulmasy, OFM, MD. Georgetown University Press, 2010.

Peter Singer Under Fire: The Moral Iconoclast Faces His Critics, ed. Jeffrey A. Schaler. Open Court, 2009.

Practical Plans for Difficult Conversations in Medicine: Strategies That Work in Breaking Bad News, Robert Buckman. Johns Hopkins University Press, 2010.

The Professional Guinea Pig: Big Pharma and the Risky World of Human Subjects, Roberto Abadie. Duke University Press, 2010.

A Rich Bioethics: Public Policy, Biotechnology, and the Kass Council, Adam Briggie. University of Notre Dame Press, 2010.

War, Peace, and Christianity: Questions and Answers from a Just-War Perspective, J. Daryl Charles and Timothy J. Demy. Crossway, 2010.

Why Marriage Matters: Twenty-six Conclusions from the Social Sciences, 2nd ed., Brad Wilcox. Institute for American Values, 2010.