

## NEW BIOLOGICAL BOOKS

PLAYING GOD?: HUMAN GENETIC ENGINEERING AND THE RATIONALIZATION OF PUBLIC BIOETHICAL DEBATE. *Morality and Society Series.*

By John H Evans. Chicago (Illinois): University of Chicago Press. \$54.00 (hardcover); \$20.00 (paper). viii + 304 p; ill.; index. ISBN: 0-226-22261-6 (hc); 0-226-22262-4 (pb). 2002.

In his book, *Can Man Be Modified?* (1959. New York: Basic Books), French biologist Jean Rostand wrote: "Here and now *Homo sapiens* is in process of becoming *Homo biologicus*—a strange biped that will combine the properties of self-reproduction without males, like the green-fly, of fertilising his female at long distance like the nautiloid molluscs, of changing sex like the xiphophores, of growing from cuttings like the earth-worm, of replacing its missing parts like the newt, of developing outside the mother's body like the kangaroo, and of hibernating like the hedgehog" (p 34).

Little more than a decade after Rostand's publication, the field of bioethics was coming to fruition in the United States, largely in response to issues, like those he raised, which outline how modern biology could be used to circumvent the natural process of reproduction and development. The putative goal of such biological approaches was to improve the design or the health of the human species.

John Evans has written a well-researched sociological account of the bioethics discourse taking place in the United States over a 40-year period. An assistant professor of sociology at the University of California, San Diego, Evans contributes an extensive content analysis of the writings of scientists, bioethicists, theologians, and philosophers who participated in the debates over human genetic engineering (HGE). He used the Science Citation Index to determine who the most influential authors were and followed their writings through several decades.

The theoretical overlay that informs Evans's analysis is drawn from early 20th-century German sociology in the works of Max Weber and Karl Mannheim. These sociologists distinguished two kinds of rationality in public discourse. Instrumental rationality refers to the reasoning used to evaluate the means to achieve a fixed or uncritically accepted set of ends. In contrast, substantive rationality describes the reasoning used to justify or critically assess contested ends, such as what type of society we want to live in or whether it is moral to cleanse the human genome of "bad genes." The author's thesis is that the structure of public discourse on HGE, particularly in the United States, has evolved from "thick debates" (involving contested ends) to "thin debates" (involving alterna-

tive means to unexamined ends). He also argues that the "thin debates," largely exemplified by an instrumental rationality, are functional to bureaucratic, elite decision-making systems that are dominated by scientists who want to protect their research fiefdoms. The "thick debates" are, however, more prevalent under conditions where the contested issues are kept alive in civil society and where democratic processes are fully activated. He argues, quite persuasively, that debates where broad theological concerns about the future of the human species or the extent to which natural reproduction is sacrosanct have been increasingly conflated into pragmatic and instrumental concerns about whether a procedure such as cloning or human gene therapy is safe. Evans reasons, "if the public had retained decision-making authority over HGE—albeit through elected officials—the debate would have remained substantive" (p 71).

The book finds little redeeming virtue in the bioethics community. In order to achieve their legitimacy in the debates over human genetics, Evans argues that bioethicists have become complicit with scientists, who have sought consistently to avoid addressing fundamental moral issues associated with HGE. Instead, through a process of concept splitting, neologisms, the creation of highly controlled scientific study commissions, and the marginalization of theological discourse, they have been able to bring in the "camel's nose" and much of its upper torso through the door of human genetic change.

The book makes a notable contribution to our understanding of the role of bioethics in the debates over human genetics. Although serving as an important conceptual frame for the book, the dualism of functional versus substantial rationality is not only overused as an explanatory distinction, but leaves scant room for nuance. After all, some theological discourse on "ends" is incoherent in a secular vocabulary. The author offers little insight into how a societal consensus is eventually achieved in debates about ends. Not all recalcitrant debates about ends are socially useful after legal and/or democratic processes have taken their course. For example, once we have a strong consensus among the community of democratic states that biological weapons are immoral (the ends have been decided), it seems quite appropriate to direct the debate toward instrumental rationality. *Playing God?* does, however, make the case that the only consensus achieved with respect to genetically modifying human beings has been carefully orchestrated.

SHELDON KRIMSKY, *Urban & Environmental Policy & Planning, Tufts University, Medford, Massachusetts*