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Bioethics Without Ethics

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Americans have always had a complex but close relationship with the idea of progress. The revolutionary origins of the nation, the mythic lure of the frontier, the celebration of entrepreneurs—these all testify to the American optimism about the future. Debates between the right and the left in the United States are not about whether to advance from or return to some static notion of an idyllic past, but rather deal with competing visions of what a better future would look like. Advances in science and technology are perhaps the most characteristic example of progress, and all serious positions in modern politics recognize that scientific progress plays an important role in building a better future.

The Body Politic:
The Battle Over Science in America
By Jonathan D. Moreno
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Within those broad outlines, however, there is plenty of room for disagreement about what progress means and what sorts of actions will contribute to a better or worse future—the very stuff of politics. In particular, science that involves experimentation on human beings and technologies that manipulate the biological nature of human beings call for and sometimes receive spirited moral debate.

In his recent book *The Body Politic*, Jonathan D. Moreno, a professor of bioethics at the University of Pennsylvania and a fellow at the Center for American Progress, examines the political struggles over biology and biotechnology in U.S. history. Moreno notes that conflicts over biotechnology cut across normal political lines: left-wing environmentalists and other progressives who reject genetic engineering and many forms of assisted reproductive technology often find themselves on the same side as religious conservatives, while pro-market libertarians and more government-friendly "bioprogressives" unite to defend potentially useful technological developments like human embryonic stem cell research that others see as morally problematic.

To analyze the political conflicts over biology in America, Moreno employs but also "updates" French philosopher Michel Foucault's notion of "biopolitics." As originally conceptualized by Foucault, biopolitics was about (in Moreno's words) "the management of bodies and the collections of bodies that we call populations."

Moreno argues that the idea must be extended beyond bodies and populations to modern conflicts about "control over the tissues, systems, and information that are the basis and manifestation of life in its various forms." The stem cell debates, for Moreno, are an excellent example of the way biopolitics has shifted from bodies to tissues. But the central ethical controversy underlying the stem cell debates was over the moral status of human embryos—not *who* should "control" human embryos or the tissues derived from them, but *whether* human embryos should be treated as a resource for scientific experimentation and medical therapy.

Biopolitics, with its emphasis on the distribution of power, is not a useful lens for clearly seeing the political debates over biotechnology. More than struggles for power, our political conflicts about biotechnology are about what is right and what is wrong, what is desirable and what is dangerous. Although Moreno's book does offer a helpful sketch of the progressive vision for science and technology in America's future, its wrongheaded focus on power means that it is mistaken about what matters most in American political life—including in debates over biotechnology.

Moreno's misunderstanding of American politics is most obvious in his deeply confused portrait of conservatism. His account of the conservative position in American bioethical debates is largely adapted from an article he co-wrote in 2007 claiming that the contemporary "neoconservative" critique of biotechnology is "rooted in Marxism and Heideggerian existentialism." This interpretation of conservative bioethics is frankly quite bizarre, and in offering evidence for it Moreno misreads and misrepresents the writings of several contributors to the pages of this journal.

The idea of "neoconservatism"—still apparently a bogeyman of some on the left—looms large in Moreno's intellectual history of conservative reactions to biotechnology. The original neoconservatives, Moreno rightly points out, were "disillusioned Marxists," who in the 1950s and 1960s began to appreciate "the non-negotiable importance of morality over and against economics, and freedom over state-enforced 'equality,'" and realized that "socialism turned out to be utterly unsuited to the nature of modern man," in the words of Irving Kristol as quoted by Moreno. While incomplete and oversimplified, this is a reasonable brief description of what Kristol called the "neoconservative persuasion." These themes and ideas have remained influential among conservative thinkers today, including many concerned with bioethics.

But Moreno's account goes off the rails when he claims that the neoconservative rejection of Marxism was simply a return to the ideas of

the younger, more idealistic Marx, who wrote about the culturally corrosive effects of capitalism. Today's conservative critics of biotechnology, Moreno argues, are, like the young Marx, very concerned with the themes of "commodification and alienation." There is some truth to this claim; many conservatives, especially religious conservatives, do share with many liberals and progressives a concern about the way biotechnology leads to the commodification of the body. The recent decision by New Jersey Governor Chris Christie, a conservative Republican, to veto a bill that would legalize commercial surrogacy was praised by conservatives and liberal feminists alike who are worried about exploitation and violations of dignity, and often oppose markets for organs, sex cells, and other tissues. And as Moreno points out, concerns over commodification

> are ubiquitous in modern philosophy and social theory. It is almost impossible to find a modern social science analysis of the body or of the way that human beings relate to human bodies that does not presuppose the idea of commodification or the idea that markets are capable of turning the body and its parts into items that may be bought and sold.

Moreno argues that these concerns about commodification can be traced to Marxism. Of course it is true that there are many in the academy that are influenced by Marx in their thinking about the ethical significance of the commodification of the body, just as many social theorists are influenced by Marx on other questions. But this does not mean that such concerns necessarily arise from Marxism. Conservatives differ with Marxists about the causes of the commodification of the body, the former tending to blame biotechnology and lax moral standards, the latter tending to blame the socioeconomic circumstances of capitalism. Moreno acknowledges this disagreement, but instead of seeing how it undermines his claim that Marxism is central to the intellectual history of neoconservative bioethics, he uses it to imply that conservative critics are intellectually incoherent. Even a favorable review of the book by a fellow progressive points out Moreno's blind spot: conservative critics of biotechnology, writes Mark G. Kuczewski of Loyola University Chicago, "often understand their thinking in more Thomistic natural law terms than Marxist concepts." Thomistic natural law is indeed one prominent element of some conservative approaches to bioethics that accounts for their concerns with commodification and alienation.

Moreno also tries to link the conservative critique of biotechnology to the ideas of the philosopher Martin Heidegger—and once again misunderstands both. Heidegger saw "the technological worldview as one in

which nature is to be mastered and used for human ends," writes Moreno. "He believed this worldview would inevitably lead to further attempts at mastery, culminating in violations of human dignity." This description of Heidegger's ideas is so broad-brush as to be useless. Other than the deterministic suggestion that technology "inevitably" leads anywhere, the idea that there is a technological attitude that sees nature as something to be mastered for human purposes dates back to the founders of modern science. When the control of nature turns to controlling *human* nature, as it often does in modern biotechnology, this can lead to the violation of human dignity. This idea hardly originated with Heidegger. In fact, more than a decade before Heidegger's *The Question Concerning Technology* was published, the popular writer C. S. Lewis offered a powerful and succinct argument about human dignity and biotechnology in his influential book *The Abolition of Man*: "What we call Man's power over Nature turns out to be a power exercised by some men over other men with Nature as its instrument." The distinction between using technology *to master nature* and using technology *to master human nature* is a very important one in conservative bioethical thought; it explains why American conservatives generally support genetically modified organisms in agriculture but are deeply suspicious of applications of genetics to human reproduction. In this sense, they clearly do not believe that the use of technology to master the nature of vegetables will "inevitably" lead to the use of technology to master human nature.

After summarizing Heidegger's philosophy in such vague and general terms as to make it seem simply compatible with conservatism, Moreno pivots toward Heidegger's most outrageous statement about technology—his infamous comparison of modern farming to militarism and Nazi atrocities. In Heidegger's words, quoted by Moreno:

> Agriculture is now a motorized food industry—in essence the same thing as the manufacture of corpses in the gas chambers and extermination camps, the same thing as the blockading and starvation of nations, the same thing as the manufacture of hydrogen bombs.

In their 2007 article, Moreno and his coauthor Sam Berger claim that conservatives have not "fully articulated their view on the matter," implying that conservatives have not repudiated Heidegger's philosophy—but of course they have never endorsed Heidegger's philosophy either, and nowhere do the authors point to any evidence that they have. (Moreno and Berger's cheap rhetorical ploy calls to mind Groucho Marx's no-win question: "Have you stopped beating your wife yet?") The only actual reference to Heidegger made by a

conservative scholar that Moreno and Berger offer is an epigraph in Francis Fukuyama's *Our Posthuman Future* (2002), a book that does not otherwise discuss Heidegger's ideas.

To be sure, Heidegger's philosophy *has* been deeply influential in the twentieth century, and some conservative thinkers have addressed its moral and intellectual shortcomings. In his 2008 book *Imagining the Future*, Yuval Levin described the very same Nazi passage Moreno cites as "surely among the most foolish and ridiculous assertions in the history of Western philosophy." And in 2001, Adam Wolfson—a conservative thinker who has written extensively about technology, and whose ideas Moreno discusses—also criticized that passage. Wolfson wrote in *The Public Interest* that "the falsity (and wickedness) of this claim should be obvious enough," taking Heidegger to task for his political and moral blindness.

Moreno further attempts to support his claim that conservative critics of technology follow Heidegger by pointing to the influence that Hans Jonas, a student of Heidegger's, had on Leon R. Kass, a central figure in conservative bioethics. What Moreno's brief intellectual genealogy leaves out, however, is that Hans Jonas decisively broke with Heidegger over a number of issues, not least the latter's failure to take ethics seriously. In a 1964 lecture on the use of Heidegger's ideas in theology, Jonas censured his former teacher: "It is hard to hear man hailed as the shepherd of being when he has just so dismally failed to be his brother's keeper. The latter he is meant to be in the Bible. But the terrible anonymity of Heidegger's 'being,' illicitly decked out with personal characters, blocks out the personal call." Jonas also criticized Heidegger for the latter's well-known rejection of humanism or of any fixed human essence or nature. Jonas's most important contributions to conservative bioethics—the centrality of morality against abstract metaphysical systems, and the importance of grounding ethics in an understanding of nature and human nature—arose from his *rejection* of Heidegger's existentialism.

The upshot of Moreno's association of conservative thought with that of Heidegger is his claim that conservatives are, like Heidegger, opposed to "the nature of technological advance *in toto*," and that they

> worry about the dangers of technology yet provide no criteria for distinguishing the destructive technologies from those that do not threaten human dignity. The technological attitude does not end with stem cell research, but is also present with regard to automobiles, vaccines, the World Wide Web, and virtually the entirety of modern life.

The implication that conservatives stand against all forms of modern

technology is risible; the further implication that they oppose life-saving technologies like vaccines is downright offensive.

Insofar as Moreno has an argument that transcends partisan smears, it seems to be that because some conservatives believe that technology and the technological attitude pose certain general and wide-ranging problems for modern society, conservatives must be uniformly opposed to all technologies; and since they lack some all-purpose criteria for distinguishing specific good technologies from the general problems technology poses, their ideas about technology are incoherent.

But conservatives do of course make distinctions on the basis of clearly articulated criteria between ethically benign technologies and technologies that are unwise, unethical, or violate human dignity. The debates over stem cell research offer a prominent example of conservatives condemning one technology while endorsing others. Those who were opposed to human embryonic stem cell research objected to the deliberate destruction of human life. Far from lacking criteria for distinguishing "destructive technologies from those that do not threaten human dignity," conservatives in that case had one very clear criterion: if the technological advance requires the destruction of embryonic human life, then it should, at the very least, not be extensively encouraged by the government or supported with taxpayer funding. This position certainly allowed for distinctions to be drawn between ethically acceptable and problematic forms of stem cell research, and led conservatives to encourage the pursuit of promising alternative avenues of research that were more morally sound.

While Moreno's account of the relationship between science and politics on the right is disappointingly confused and inaccurate, the rest of the book addresses the relationship between science and politics in a provocative and fascinating way. One of its chief strengths is its discussion of not only the ethical implications of new technologies that typically occupy professional bioethicists, but also the cultural, moral, and political significance of science. The political and moral implications of scientific knowledge and the scientific mindset are as important for modern societies as the ethical consequences of the technology that science provides. Science is politically and socially important not only for its Baconian implications of mastering nature but also for how it changes the way we see ourselves and the world, sometimes widening and sometimes narrowing our understanding of human life.

The Body Politic is in large part a defense of progress through science and technology, so it is perhaps not surprising that Moreno emphasizes

the way that scientific enlightenment can encourage progress in morality, human equality, and democracy. The book begins with two epigraphs that represent what Moreno sees as two distinct American attitudes toward science. The first is drawn from Benjamin Franklin's well-known letter to the chemist Joseph Priestley, wherein the scientist-statesman extols the virtues of scientific progress and waxes rhapsodic for the future: "The rapid Progress *true* Science now makes, occasions my Regretting sometimes that I was born so soon. It is impossible to imagine the Height to which may be carried in a 1000 Years the Power of Man over Matter." The second comes from Poe's "Sonnet—To Science," a romantic lament on the disenchanting power of science that has "torn the Naiad from her flood" and "driven the Hamadryad from the wood."

Moreno argues that these two epigraphs represent "competing and remarkably persistent strains in America's body politic." Franklin's letter is an excellent example of America's optimistic stance toward science, but it also illustrates one of the crucial limitations of science: "O that moral Science were in as fair a way of Improvement, that Men would cease to be Wolves to one another, and that human Beings would at length learn what they now improperly call Humanity!" While science has obviously been successful in achieving material progress, it has had far less success at bringing moral and spiritual progress.

In contrast to Franklin's heady optimism about material progress, and his sensible acknowledgement of the limits to the moral advance it may achieve, stands Poe's sonnet, which mourns the way science destroys traditional beliefs and undermines our ability to experience nature with a sense of wonder and joy. Moreno responds to Poe's gloom by claiming that modern science will not diminish "the human need for reverie and romance," and could even stimulate the creation of fine new works of "popular and high culture"—the one example of which he cites from "the last two centuries" is the 2009 movie *Avatar*.

However, Moreno also suggests that scientific enlightenment frees people from "theocratic and conservative" authorities that prevent those in "traditional and hidebound societies" from "revel[ing] in the unbound." But can the choice really be between a culture oppressed by the rule of theocratic authorities and a culture dominated by vacuous science fiction like *Avatar*? While this comparison surely presents a false dichotomy between science and theocracy, it is part of Moreno's general way of thinking about science that focuses not on the particular claims made by scientists, but rather on the scientific method and its historical influence. While conservatives are often suspicious of the way science

disenchants the world, and more importantly of how it reduces human nature, consciousness, and freedom to mere biological impulses and neurological events in a way that undermines our self-understanding as free and rational beings, Moreno focuses on the broad historical effects of scientific enlightenment.

Moreno rightly notes that many of the American founders were deeply interested in science, or were even scientists themselves. He argues that Thomas Jefferson's description of America as an experiment was particularly apt, because it captured the way the founders' political views resembled and anticipated the nineteenth-century pragmatist Charles Pierce's philosophy of science, particularly his "fallibilism," the idea that "all statements about the world may be proven wrong." Moreno continues that "the founders were only too well-aware that events could surely have falsified their theory that popular self-government is possible" and that their philosophy was pragmatic in the sense that "it would be put to the test in experience."

The suggestion that the founders thought of the United States as a scientific experiment in a literal sense is a bit silly. As it happens, the central tenet of the founders' philosophy—that, in the words of the man who would preside over its greatest test, a "nation conceived in Liberty, and dedicated to the proposition that all men are created equal" is possible—was indeed challenged by experience. That Americans engaged in such a bloody and protracted struggle with each other to test this proposition highlights an important difference between politics and the scientific method. In politics, there are propositions, such as the hope "that government of the people, by the people, for the people, shall not perish from the earth," that are worth fighting and dying for. From a scientific perspective, why should Lincoln not have seen the breakdown of the country and the toll of war as the ultimate falsification of the theory that government dedicated to the equality of all human beings is possible? Why should the testing of this proposition continue, as he would say in his Second Inaugural Address, "until all the wealth piled by the bondsman's two hundred and fifty years of unrequited toil shall be sunk, and until every drop of blood drawn with the lash shall be paid by another drawn with the sword"? Was the secession of the Confederacy not a strong piece of evidence against the possibility of the Union? And if the necessity of such an immensely destructive civil war was not such evidence, then what would scientifically inclined politicians take for evidence that their philosophy of government had failed? While a scientist would rightly be condemned for stubbornly persisting with a hypothesis in the face of such difficulties, we

rightly admire Abraham Lincoln as a great statesman for his steadfast commitment to the Union.

The importance of committing to moral propositions, rather than holding them tentatively, is a significant difference between science and statesmanship, but the spirit of inquiry exemplified by modern science surely does have a role to play in politics. Moreno argues that "science is no respecter of the preferences of the powerful," which has some truth to it, but is rather too imprecise. Moreno is correct that science "challenges prejudices, obscures boundaries, and undermines familiar categories" and "threatens comforting and stultifying dogma," but these are all cases where science is no respecter of the *opinions* of the powerful. Of course science, whenever it is worthy of the name, is no respecter of the opinions, prejudices, or dogmas of anyone, whether mighty, downtrodden, or otherwise. But this does not mean that science is no respecter of the *preferences* or the will of the powerful. In the latter half of the twentieth century, there have been many cases where science has respected and been directed by powerful and wealthy governments and industries. Whether particular nuclear physicists respected the preferences of the Soviet or American governments to develop ever more powerful stockpiles of nuclear weapons, it is undeniable that science, understood as an enterprise, respected those aims to the extent that it contributed to the development of those weapons.

Later in the book, Moreno notes how members of the Native American Havasupai tribe of Arizona were disturbed by the findings of geneticists that conflicted with their traditional religion. The Havasupai creation legend told that their people had been "formed by gods from the dust and waters of their canyon" (the Grand Canyon), while studies of their genetic material indicated that they had migrated from Asia via the Bering Strait. Moreno argues that "by putting facts like genetic origins before us, the new biology is creating new biopolitical power relations," and that the story is "a reminder of the key to the new biopolitics: the struggle for control over the new biology and the information and potential power it represents," noting that cases like this "should humble bioprogressives like me" and that they demonstrate "the volatility, depth, and unpredictability of the new biopolitics."

As it happens, there are some novel elements in the Havasupai case, and while Moreno does not explicitly take them up in his brief treatment in the book, he and his then-colleague at the University of Pennsylvania, Arthur L. Caplan, wrote a paper for *The Lancet* in 2010 on what the Havasupai case means for informed consent and research on human tissues. The case began in 1990, when tissues and genetic samples were collected for a study of diabetes

in the Havasupai population—but were then widely distributed by researchers without the consent or knowledge of the Havasupai. The samples were eventually used to perform the anthropological studies that the Havasupai found particularly distressing, as well as studies on "inbreeding [and] schizophrenia" in the population. Moreno and Caplan argue that the case shows that "it is time to rethink the entire model for obtaining biological materials," moving to one where tissues and organs are treated as a gift from the donor to the research community, and where "once donated, all rights and control over the use of organs and tissues are forgone." So it seems that, in what Moreno now calls a "struggle for control over the new biology and the potential power it represents," he believes that bioethicists should side with the preferences of scientists over their research subjects—or, in more "biopolitical" terms, bioethicists should support the powerful over the oppressed, the governing over the governed.

Moreno thinks that conservatives exploit populist suspicions of science to drum up controversy, making confused and confusing claims about new technologies. He offers recent quarrels over human-animal chimeras as an example, focusing on one legislative effort to regulate the field: the Human-Animal Hybrid Prohibition Act proposed a few years ago by then-Senator Sam Brownback (R.–Kans.). Moreno points out that "most broadly, the bill would have banned 'a human embryo into which a non-human cell or cells (or the component parts thereof) have been introduced to render the embryo's membership in the species *Homo sapiens* uncertain.'" He notes that the correct term for an animal created in such a way would be "chimera," not "hybrid," and claims that "this slippage is telling, and it threatens to hobble critical research."

Moreno is right about the technical definitions of the terms: a hybrid is an organism whose two genetic parents come from different species; a chimera is an organism that has cells from another organism in it. But in his haste to sock Brownback's bill, Moreno himself misses a far more basic and important distinction: the human-animal chimeras that scientists use for research are created by adding human cells to animal embryos, while the types of chimeras Moreno criticizes the Brownback bill for seeking to prohibit are created by adding animal cells to human embryos. While both are properly called "chimeras," they raise entirely different sets of ethical concerns. The former technique involves the potentially troubling, but often useful "humanization" of lab animals. The latter technique would involve, quite literally, the dehumanization of human embryos—which would have few scientific applications and would

be deeply disquieting. Even President Clinton's Human Embryonic Research Panel, well known for its liberal stance on human embryo research, recommended against allowing federal funding for such experiments.

Moreno is right to note that new biotechnologies can be both disconcerting and confusing for the public, with "cultural anxieties about monsters" and poetically loaded terms like "chimera" that can "cohere all too comfortably with the legacy of Dr. Frankenstein." But from the standpoint of a defender of science and enlightenment, the opposite impulse—to ridicule concerns over new biotechnologies as unserious and obscurantist—can be equally counterproductive. Brownback's legislation, for instance, was described as an attempt to "outlaw centaurs and minotaurs" by *Reason* columnist Ronald Bailey, or "mermaids [and] centaurs" by *Politico*'s Glenn Thrush. Ridicule is apparently an easy substitute for reason when self-styled defenders of science want to brand their opponents as "anti-science" extremists.

In response to the argument made by Yuval Levin that modern biology—particularly discoveries in genetics—might undermine or weaken our belief in human equality, Moreno strangely begins by noting the scientific problems with genetic determinism, pointing out that genes interact with the environment in complex ways. The limits of genetic determinism, Moreno sensibly argues, mean that "total genetic control" is "beyond the reach of any biotechnology." But even though genetics cannot account for everything about human nature, genetic information that does point to biological differences between people can still undermine the sense of fundamental natural or biological equality that in turn supports our ethical and political concepts of equality. Levin points to the history of eugenics, which involved the sterilization of people deemed genetically unfit in the early and mid-twentieth century, as an example of the way viewing people in terms of their genetics can clash with and undermine our commitment to political equality. These coercive programs of forced sterilization were embraced by many scientists and progressives who sought to ameliorate social ills and improve society and human nature by eliminating the genetically unfit. The coercive means employed by twentieth-century eugenicists have generally fallen out of favor, but the idea of choosing what sorts of genetic characteristics make a life worth living has arguably found a place in contemporary reproductive technologies like preimplantation or prenatal genetic diagnosis that are currently used by doctors and patients to select against future offspring deemed genetically unfit. Even if equality is fundamentally a political and ethical concept, discrimination based on diagnoses of genetic difference certainly does

occur, pointing to how the new science of genetics stands in tension with human equality.

Moreno goes on to assert that "without the Enlightenment values that have fostered experimental science, no one would even be worried about human equality as a moral principle." Even if this assertion were true—and there are in fact many ways it could be challenged—that would not mean that experimental science itself would never make discoveries or claims that could undermine those Enlightenment values. Just because liberal democracy tends to support scientific inquiry does not necessarily entail that scientific inquiry will in turn support liberal democracy.

Conservatives worried about the morally corrosive effects of science are concerned that the materialistic and reductionistic account of the world given by modern science has no room for any concept of human nature that can account for the idea that we are free and rational beings. The rejection of the notion of an unalterable human nature, that might serve as a standard by which to judge different ideas of morality, leads toward relativism. Hans Jonas articulated this concern in his essay "Philosophical Aspects of Darwinism," in which he argued that the "anti-Platonism" of modern science has meant that "reason ha[s] been reduced to a means among means, to be judged by the efficiency of its instrumental role in the survival issue: as a merely formal skill—the extension of animal cunning—it does not set but serve aims, is not itself standard but measured by standards outside its jurisdiction."

Leon Kass, in *Life, Liberty, and the Defense of Dignity* (2002), points out that an inability to understand the moral significance of human nature undermines our capacity to judge good applications of science from bad. Moreno cites this passage (although his quoting of the passage, like many other quotations in the book, is slightly erroneous; this is from the original): "If, however, we can no longer look to our previously unalterable human nature for a standard or norm of what is good or better, how will anyone know what constitutes an improvement?" Moreno acknowledges that "the question is a good one and the logic seems unassailable," but notes that "there's vigorous disagreement about what that norm of human nature is," and that "the idea of an 'unalterable human nature' is not necessarily one that is embraced by bioprogressives."

But if bioprogressives reject the notion of human nature, then to where do they look for the values to direct the progress of biotechnology? Moreno appeals to the uniquely American idea of the frontier as a source of inspiration for guiding progress: "The point is not simply to clear the forest as we begin to stake a claim in the frontier, but to

build a homestead, literally to make a homeland of this wilderness." While scientific inquiry can clear the dark forests of superstition and ignorance, and technology can build a comfortable dwelling, can they show us *how* to live well and wisely in the wilderness, our uncertain future? Moreno claims that the direction in which scientific and technological progress is moving us can be evaluated in light of the evidence, through "the public policy process." Evidence-based public policy can be and often is essential for solving the problems of living together, including many of the problems posed by science and technology. But policy and politics need to be grounded in ethics, and it is audaciously optimistic to imagine that they can answer the deep philosophical and moral questions that modern science has left us.

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