Part 2. Featured Scholar

The Body Politic: An Introduction

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Editor's Note: Biothics, as Jonathan Moreno points out, is often observed to have become "politicized." In an effort to explore some of the implications of this assessment, Moreno decided two years ago to write a book that would draw on his experiences in the academic and policy worlds. In that book, *The Body Politic* (Bellevue Literary Press, 2011), Moreno uses his unique take on the history, philosophy and sociology of science, political philosophy, ethics, and science policy, to explore what he calls the "new biopolitics." *Theoretical & Applied Ethics* is honored to present an adaptation of the Introduction to that book, which we believe will further establish Moreno as a leading voice in our discipline.

Every two years the National Science Board compares America's science and technology performance to the rest of the world. The 2010 report contained several nuggets of information from polling about Americans' attitudes toward scientific breakthroughs: 68 percent of Americans said that the benefits of scientific research strongly outweigh the harmful results, and only 10 percent said that harms outweigh the benefits.[1] Other surveys confirm these results. As the Pew Research Center reported based on its own 2009 polling, "Americans like science":

> "Overwhelming majorities say that science has had a positive effect on society and that science has made life easier for most people. Most also say that government investments in science, as well as engineering and technology, pay off in the long run. And scientists are very highly rated compared with members of other professions: Only members of the military and teachers are more likely to be viewed as contributing a lot to society's well-being"[2]

But there is also an undercurrent of unease. In spite of its generally upbeat findings, the National Science Board also found that nearly half of Americans believe that "science makes our way of life change too fast." And it seems that the authors of the National Science Board's report excluded some survey results from the final draft, results showing that Americans are much less likely than the rest of the world to accept evolutionary theory and the "big bang" explanation of the origins of the universe. The Board said the less encouraging data were excluded from the final draft because they were flawed, but a White House spokesman criticized the omission: "The Administration counts on the National Science Board to provide the fairest and most complete reporting of the facts they track."[3] And a science literacy researcher said that the board's decision "reflected the religious right's point of view."[4] In America even surveys about scientific controversy can become matters of controversy.[5]

Future Shock *Redux*

But no particular group, right or left or somewhere else, is immune from the sense that change is accelerating at an ever faster pace with each passing year. The experience of too-rapid change, whether trivial or profound, is a characteristic of modernity. Information technologies are perhaps the sentinel sources and examples of what Alvin Toffler called "future shock" in 1970, right around the time that a young Bill Gates programmed a GE computer that his mother purchased at a rummage sale. Information scientists cite "Moore's law," to the effect that computing capacity doubles every two years. We've all experienced the anxiety, frustration, and even resentment that accompanies a new version of a software product on which we depend, or the realization that people younger than ourselves have adopted a new technology that makes the pace and style of their lives seem very different from our own.

Reservations about rapid technological change are widely shared regardless of political party or philosophy. In America the tension between approval of science and worry about the rapid changes it can bring bubbles up in special ways when moral or cultural choices seem to be involved. We've seen this tension play out time and again in our seemingly endless controversies about the teaching of evolution, reproductive rights, the moral status of the human embryo, the origins of the universe, and nearly all the issues about science that relate to human values.

Sensitivities about science are understandable. People rightly sense that big stakes are involved when science pushes on familiar boundaries, most of all when it seems that our customary and largely workable moral framework is being challenged. Americans seem especially sensitive to such challenges. Ours is in many ways a deeply conservative country where consistently the vast majority report that they believe in God (generally around 90 percent). The prominence of faith among Americans becomes even more striking when compared

with modern Western Europe, the historic source of America's core Enlightenment values of rationality and science. There, the proportion of believers is around 50 percent. Americans admire science but also treasure traditional values, which are in some ways threatened more by science than any other institution; our attitudes tend to assemble at the extremes. In this sense, America is both the principal product and the main stage for the ongoing drama of the Enlightenment. Here are these universal values of truth, freedom and equality founded on reason rather than the authority of a church or sovereign rulers; but is reason enough, or does it threaten those very values?

The ever-quickening pace of discovery in biology is an especially volatile source of "wedge" issues in our politics because they remind us of uncertainties about how to apply familiar values about life itself. These uncertainties are particularly clear when human dignity seems to be threatened, as critics charge is the case with embryo-related research. In 2005 the Johns Hopkins University-affiliated Genetics and Public Policy Center found that three-quarters of Americans opposed human embryo cloning for research.[6] A 2008 survey sponsored by the conservative Ethics and Public Policy Center found that when the question of embryonic stem cell research is put in terms of curing disease most favored the research, but when described as destroying embryos a small majority opposed it.[7] Five polls by the Pew Center on Religion and Public Life from 2004 to 2007 found that a majority agreed that it was "more important to continue stem cell research that might produce new medical cures than to avoid destroying the human embryos used in the research."[8]

These results suggest how conflicted Americans are about basic questions of science and ethics. This is nothing new; deep-seated worries about science that are as old as the Enlightenment itself have been poured into bottles made new by the experiences of the twentieth century. The sociologist John Evans has found that conservative Protestant religious groups in the United States do not reject science *per se*. Rather, they "are opposed to scientists' influence in public affairs not because they do not agree with their methods, but for moral reasons….[T]the relationship between religious persons and science is far more subtle than the dominant assumption of religious opposition to science due to a total rejection of scientific methodology."[9] The problem is not mistrust of science so much as it is mistrust of scientists.

Biopolitics, Old and New

Biopolitics refers to the ways that society attempts to gain control over the power of the life sciences. Although ideas about the role of biology in politics may be found at the earliest stages of Western philosophy, biopolitics promises to become far more prominent as the power of the modern life sciences becomes ever more obvious. The old politics of biology operated in the dark about the underlying mechanisms of biology. The new politics of biology arises in the midst of rapidly growing understanding of basic life processes, with seemingly limitless opportunities to direct individual and social change. Simply put, in the modern politics of biology the stakes are about as big as they can get.

The modern abortion controversy has elements of both biology in politics and the politics of biology, especially as it has been a recurrent theme in the United States since the 1970s. As an example of biology in politics, the positions taken by pro-life and pro-choice forces have served as organizing principles. In an example of the politics of biology, each side attempts to manage the power behind a decision whether to continue a pregnancy or not. But the binary simplicity of the abortion decision itself (i.e., to abort or not), and the relative straightforwardness of the positions one may take on this issue in its strictly political sense (pro-life or pro-choice) are being vastly outstripped by the scenarios forced upon us by the new biology. As biological knowledge grows and as its applications become available, vastly more complicated and subtle new issues will emerge that can be brought under the heading of biopolitics, the new politics of biology.

The term biopolitics was popularized by the French philosopher and historian Michel Foucault.[10] For Foucault, biopolitics is both a consequence and manifestation of biopower, the management of bodies and the collections of bodies that we call populations.[11] Key to understanding this idea of biopower is suspending the standard modern tendency to think of the state as the main or even the principle locus of power. Rather, as the philosopher Jason Robert has observed, Foucault's focus is on those powers among people who have certain key positions in the knowledge economy: "bureaucrats, administrators, public health nurses, teachers, physicians, genetic counselors, psychotherapists, statisticians, economists. The political government of individuals is effected through special competence and disciplinary credentials….Foucault documents a new power over life, distinct from the right of the sovereign."[12]

Classically, power over bodies and populations was expressed through the idea of governmentality. Not limited to state power, and subsuming even sovereign authority, society has since the Enlightenment created institutions to guide conduct in both personal and public matters. As the requirements for a rationale for such

arrangements intensified through the emergence of the liberal state, so has the role of expertise, such as the specialized knowledge of the statesman and the scientist. Competition and conflict among parties contending for control over the both the actual results and the symbolism of biology have also intensified since the Enlightenment. As Foucault describes it, biopolitics "is the endeavor, begun in the eighteenth century, to rationalize problems presented to governmental practice by the phenomena of a group of living human beings constituted as a population: health, sanitation, birthrate, longevity, race."[13]

Prior to the Enlightenment, Foucault argued, the sovereign exercised supreme power over life with the threat of death. With the rise of rationality as a criterion of acceptable sovereignty, the modern state asserts control not merely over life and death but also over ways of living. The justification for the exercise of this biopower is the need to regulate labor, punishment, public health, reproduction, and various other core cultural habits for the sake of social well-being. Biotechnology may now be added to the list. In the words of another writer on Foucault and biopower, "[g]enetic engineering and genetic-based pharmaceuticals, among other biotechnological pursuits, share an approach aimed at identifying and engineering what are seen as the most basic components of life."[14]

Foucault's idea of bipolitics must brought up to date. In the more than quarter century since his death, we have entered what has been called the "biological century."[15] If that description it accurate, what does it mean for our politics? The anthropologist Paul Rabinow puts it well: "My educated guess is that the new genetics will prove to be a greater force for reshaping society and life than was the revolution in physics, because it will be embedded throughout the social fabric at the microlevel and by a variety of biopolitical practices and discourses."[16]

In the early 21st century we are crossing the threshold to a new biopolitics. Rather than with control over bodies and populations *per se*, the new biopolitics has to do with control over the tissues, systems and information that are the basis and manifestation of life in its various forms. This new biopolitics is vastly more subtle and in important ways potentially more powerful than familiar political struggles about biology, like those having to do with the ability to terminate a pregnancy or certain clumsy forms of eugenics, and there are already many more protagonists in biopolitics than in the past. Whether the new biology actually achieves the Promethean power that is often touted, the symbolism alone invites struggles for control. Neither government, the private sector nor the scientific community will be safe from the risk of a grave loss of confidence in its ability to manage the emerging forces that the new biology seems poised to let loose. If only some of the predictions bear fruit, the new biology will challenge everything in its path, from our understanding of ourselves as living creatures, the ways we live, our relationship to the world, our social arrangements and values, and our political systems.

Science/Technology/Invention/Innovation

The new biopolitics has taken shape just as two venerable distinctions are, in some respects, in the process of collapsing. Technology has been around since at least the beginning of agriculture, on some accounts even extending back to the tools and weapons used by hunter-gatherers. Plato wondered how it was possible for mortals to have knowledge of craft or *techne*. But science is a latecomer. One difference between science-based and nonscience-based technology is that scientific theories often have surprising implications that even their pioneers don't anticipate. A classic example of the surprising nature of science is the fact that Albert Einstein had to be persuaded by Leo Szilard that the atomic bomb was a practical possibility, partly in light of the Einstein's own Special Theory of Relativity, so that Einstein would lend his prestige to a letter alerting FDR of the potential for a weapon holding massive of destructive capacity based on the new physical theory.

The development of science-based technology is remarkably recent, accelerating only toward the end of the nineteenth century, with specific, crafted applications of ideas drawn from the emerging explanatory and demonstrable theories, especially in biology. And of course it is still possible to engage in technical manipulations of the world without paying attention to any underlying theory, so science and technology will never be identical. But there is every reason to believe that the convergence between science and technology will go on indefinitely. For a time the idea of starting with a scientific theory as a way to solve a practical problem was so novel that the term "applied science" was used. But so much technology is now science-based, as in the development of new microprocessors, that what used to be called applied science is becoming virtually synonymous with technology.

To appreciate the traditional relationship between technology and invention, take the example of Thomas Edison. He was both a nonscience-based technologist and an inventor. The incandescent light bulb was built on a diverse array of gradually improved materials and owed its origins only very indirectly to electrical theory (an early theorist of which was another great American inventor, Benjamin Franklin).[17] Alexander Graham Bell was another to whom the term technologist/inventor applies. Both Edison and Bell were brilliant craftsmen who addressed a technical problem. But neither was an

innovator. Innovation, in the words of the historian Harold Evans, involves more than inventing a new technology; it involves "a universal application of the solution by whatever means….Invention without innovation is a pastime."[18] Universal application is a matter of dissemination, of moving an ingenious solution out into the world. In that sense, the telephone as an innovation is owed to someone who is hardly a household name: Theodore Vail, the founder of AT&T. His vision and organizational genius turned Alexander Graham Bell's technology into a national telephone system through the merger of Western Union and the Bell Company.

The distinction between invention and innovation is more formidable, because it is usually still true that what works in a lab could be prohibitively expensive to disseminate or might not be publicly acceptable. But in some cases, the internet has virtually (the pun is coincidental but fortunate) eliminated the costs of innovation. The Pentagon's invention of the internet in the 1960s created the opportunities for innovators like Tim Berners-Lee to develop the World Wide Web. Reminiscent of AT&T's Theodore Vail, who married two entities to produce his communications system, Berners-Lee joined hypertext to the internet to produce the Web. Today, thanks to that fantastic resource, it is possible to invent an iPhone application and disseminate it almost immediately with hardly any capital requirements on the part of the inventor/innovator. Unlike the case with energy, where the costs of moving from invention to innovation are notoriously high, where the key product is information the moment of invention is also the moment of innovation. With little notice, much the same convergence of invention and innovation is happening in laboratory biology, as genetic sequences can now be e-mailed to labs around the world, and chromosomes reconstructed from the biochemical data. In this sense, as well, ease and immediacy of scientific communication are giving the scientific community leverage as a new invisible college and also constituting a global force, a world polity of instantly shareable knowledge and innovation.

Biopolitical Organizing

It is no accident that biopolitics is coming into its own just as knowledge of basic biological mechanisms is beginning to present opportunities for remarkable medical interventions. Previously, the concrete power of biology and contributions of basic biological knowledge to human health has been a matter of debate. The extension of the human life span in the developed world since 1900 has until recently been almost entirely attributable to improvements in public health, particularly the eradication of infectious disease through improvements in water supplies and personal hygiene; as a wag once observed, whoever invented underwear was perhaps the greatest contributor to public health of all time. However, it seems that in recent years a growing portion of the developed world's increased average life span is due to medical interventions, especially in the elderly. As more is learned about gene expression and cellular processes, these interventions can take place earlier in life, resulting in less suffering through disease prevention and perhaps still longer lifetimes. If longer lives are also lives of high quality, the benefits for human flourishing could be vast, but the power that underlies these improvements will, like all sources of power, be a matter of contention. In the midst of these struggles for control both the legitimacy of the life sciences as governable and trust in the goals and practices of scientists themselves, will be at risk.

In the past few years a handful of thinkers and activists have explicitly or implicitly recognized the new biology as a new way of organizing around political values. The questions raised by all sides in biopolitical debates are of ultimate importance for the way we see ourselves as a society and because, unlike many political questions, the usual ideological labels are a poor predictor of policy positions. The anti-genetics crusader Jeremy Rifkin was perhaps the first political organizer to notice that anxieties about the implications of modern biology cut across the familiar left-right political spectrum.

> "The current debate over embryo stem cell research, as well as the debates over patents on life, genetically modified foods, designer babies, and other biotech issues, is beginning to reshape the whole political landscape in ways no one could have imagined just a few years ago. . . Although reluctant to acknowledge it, both social conservatives and left activists are beginning to find common ground on a range of biotech-related concerns….The threads that unite these two groups are their belief in and commitment to the intrinsic value of life and their growing opposition to what they perceive as a purely utilitarian perspective on biotech matters being extolled by scientists, politicians and market libertarians"[19]

These issues have already begun to make for strange political bedfellows. Some on the left oppose these changes as further threats to human equality, while some on the right worry about the implications for human dignity. Alliances of convenience will develop as people with differing political sympathies could make common cause when these issues arise. All but a few libertarians, radical technophiles and pro-business capitalists have at least some reservations about these kinds of developments. As Rifkin notes, "[i]f the convergence [between social conservatives and left activists] continues to pick up momentum, conventional politics could be torn asunder in the biotech era."

In a telling foretaste of the new biopolitical alliances to come, consider the shortage of organs for

transplant. The medical and bioethical establishments favor altruistic kidney donation. This has been the mainstream view ever since transplants from living donors have been feasible. But there is not nearly enough supply to satisfy demand, leaving thousands to die of kidney disease each year. Recently, however, a prominent conservative intellectual has joined forces with a well-known pro-choice advocate to challenge the public policy that prohibits compensating organ donors.[20] Meanwhile, most cultural conservatives and social liberals worry about the moral and social implications of paying for organs, even though lives could be saved.

The philosophical intersections that grow out of the new biopolitics can be mapped. Mainstream bioprogressives align with traditional business conservatives in favoring private enterprise. Bioprogressives on the left emphasize regulation, equality, and the common good, while bioprogressives on the right are often of a libertarian cast, emphasizing free enterprise as the most reliable source of innovation. Bioconservatives include both religious traditionalists, mainly Christian, and secular neoconservatives who do not appeal directly to religion but rather to certain traditional religious values in their critique of science, which they regard as a threat to human dignity and moral equality; some appeal to a core concept of human nature itself. "Green" progressives harbor deep doubts about the implications of science for social justice, often striking a distinctly bioconservative note. A small but growing and vocal philosophical movement, transhumanism, largely embraces technological change as promoting the very values cherished by bioconservatives. In spite of some important dangers, transhumanists see the prospects for drastic enhancements in what bioconservatives regard as an essential human nature that is too precious and fragile to withstand human manipulation.

Quite different understandings of the history and implications of science and technology, and about the ability of human beings to adapt to moral challenges, are at the core of these philosophical differences. Perhaps with more dialogue about the core differences the policy disagreements may be ameliorated. After all, if many on the left harbor doubts about science, they have nonetheless not been driven into the arms of social conservatives. Nor are many social conservatives as negative about science as some rhetoric would suggest. We might hold out the hope all sides could be convinced that science, within carefully negotiated limits, can enhance and enrich the quality of our spiritual as well as our material lives. This is, in essence, the mainstream liberal and progressive view. Yet I think important differences among these novel biopolitical alliances will remain, differences rooted in quite different understandings of the relationship between scientific ways of thinking and human rights, as well as lingering and characteristically post-Enlightenment reservations about the trustworthiness of scientists themselves.

In a way, of course, these political realignments are only new ways of shuffling an old deck. Like generals, political organizers are good at fighting the last war. For those perceptive enough to identify them, however, the new biopolitics also creates opportunities for novel forms of organization and innovative social movements. As is true of the new biopolitics in general, there are already clear signals of what is to come. Take the case of advocacy concerning the needs of persons with certain diseases, disorders or disabilities. Polio sufferers and their families, persons in wheelchairs, cancer patients and others have come to be powerful interest groups, securing funding and publicity for massive public health programs, accessibility measures like curb cuts and ramps, and government support of cutting edge research programs. It is now common to speak of "disease communities," a 20th century form of affiliation and self- and mutual identification. Those advocating on behalf of research funding for diseases that are too uncommon to have much political clout on their own have organized into rare disease coalitions. Perhaps the most vivid example of the legislative possibilities of these efforts is the long-term growth of the NIH budget and the passage of the Americans with Disabilities Act in 1974.

One group has that has explored the implications of this new kind of movement is the Little People of America (LPA). Since its founding in 1957, the group has scored impressive gains in both concrete public policies and intangible public attitudes toward those of short stature. Increasingly, members find themselves at the interface of prevalent conceptions of the "normal body" and the growing number of ways to use biotechnology on behalf of a chosen bodily identity. At least some couples who both have achondroplasia, a genetic anomaly that causes short stature, would prefer to have children with the same condition. They want their children to feel fully part of the culture of their community, as they define them. Similarly, there is longstanding division among people with hearing impairments about whether cochlear implants are culturally acceptable or reinforce a stigmatizing notion of disability.

Short stature and hearing impairments are physical conditions that have opened the door to political organization, a sense of community, and even a redefinition of culture. Still more profoundly, genetic knowledge is creating a novel sense of deep kinship that is founded on genetic identity itself. As Rabinow puts it, "There already are, for example, neurofibromatosis groups who meet to share their experiences, lobby for their disease, educate their children, redo their home environment, and so on….[I]t is not hard to imagine

groups formed around the chromosome 17, locus 16,256, site 654,376 allele variant with a guanine substitution."[21] Not only does modern genetics create a sense of community among those with certain conditions, it makes it possible for people to select for children with the same conditions. Some will be physically manifest, some will not, but in either case they will change the ways that people view their shared interests. In other words, politics will increasingly become biopolitics.

Though of course moral questions about reproduction stand in the background of much of our biopolitics, we may be confident that these questions will themselves be transformed by events we cannot anticipate, in both science and public affairs. Some of the emerging topics I will discuss are directly related to the politics of reproduction, others to the ways that we die, and still others to the remarkable prospects for new directions in health care, in knowledge about our biological nature, and for the enhancement of "natural" capacities in ourselves or our children. Formerly clear lines will be blurred; inquiry has a familiar and sometimes annoying tendency to upset comfortable ways of thinking. Although the results will almost certainly not conform to our most confident predictions, both our reasonable expectations and the surprises in store will force reexamination of ways we think of ourselves as individuals and about the ways we arrange to live together.

Notes

1. National Science Board, Science and Technology Indicators 2010. http://www.nsf.gov/ statistics/seind10/
2. The Pew Research Center for the People & the Press, *Public Praises Science; Scientists Fault Public, Media* 2009 http://people-press.org/report/528/
3.The spokesman was Rick Weiss, former *Washington Post* reporter and my former colleague at the Center for American Progress.
4. Evolution, Big Bang Polls Excluded from NSF Report, *Science Insider*, April 8, 2010 http://news.sciencemag.org/scienceinsider/2010/04/evolution-big-bang-polls-omitted.html
5. And controversies about new technology often miss the mark. In 2010 conservative Virginia state legislators worried that implantable microchips, which use G.P.S. technology to track Alzheimer's patients who tend to wander, might be the "mark of the beast" warned of in Revelations. In their fundamentalist zeal the Virginia elected officials who worried about Biblical prophecy missed a truly worrisome social question raised by implanted microchips: the prospect that someday everyone's physical location could instantly and constantly be recorded and accessible.
6. Genetics and Public Policy Center, "Cloning: A policy Analysis," 2005 http://www. dnapolicy. org/ images/ reportpdfs/ Cloning A_Policy Analysis Revised.pdf
7. Yuval Levin, "Public Opinion and the Embryo Debates," *The New Atlantis*, Spring 2008 http://www.thenewatlantis.com/publications/public-opinion-and-the-embryo-debates. Arguably the wording of the relevant question was rather loaded: "It is unethical to destroy human embryos for the purposes of research because doing so destroys human embryos that are human beings and could otherwise have developed and grown like every other human being."
8. Pew Forum on Religion and Public Life. 2008. Declining majority of Americans favor embryonic stem cell research. http://pewforum.org/docs/?DocID=317
9. John Evans ,University of California at San Diego, unpublished manuscript, 2010.
10. A number of Foucault's works illustrate his view of biopolitics and biopower, including: *The order of things*, New York: Vintage Books, 1970 ; *Discipline and punish: The birth of the prison*. Trans. Alan Sheridan, New York, Vintage Books, 1977; and *The history of sexuality*, volume 1: An introduction . Trans. Robert Hurley, New York, Vintage Books, 1978.
11. For the record, though the elements of Foucault's thinking described here have been a source of inspiration for part of the argument in this book, it does not follow that I endorse all of Foucault's view about science, or what are often taken as his views, including that science has been mainly part of a conspiracy of hegemonic exploitation. It seems to me that the role of science in political history is more subtle than was captured the fashionable academic slogans of the 1970 and 80s.
12. Jason Robert, M.A. Thesis: "Biotechnologies of the Self: The Human Genome Project and Modern Subjectivity, McMaster University, 1996.
13. Cited in Mitchell Dean, *Governmentality: Power and Rule in Modern Society* (Thousand Oaks, CA: SAGE, 1999), p. 99.
14. Majia Holmer Nadesan, *Governmentality, Biopower, and Everyday Life* (New York: Routledge, 2008), p. 2.
15. I believe this term was first used by Gregory Benford in an article in *Engineering & Science* in Spring, 1992. At the risk of being a lot more pedantic than I want to be in this book, I believe the grammatically correct expression is "the century of biology." Still, the point is clear enough.
16. Paul Rabinow, "Artificiality and Enlightenment: From Sociobiology to Biosociality," in Mario Biagioli (ed.), *The Science Studies Reader*, New York: Routledge, 1999.
17. Edison seemed to believe that, in his case, too much conscious focus on theory would impair his remarkable intuitive powers. Referring to the formula for voltage, Edison recalled that "At the time I experimented I did not understand Ohm's Law. Moreover, I do not want to understand Ohm's law. It would prevent me from experimenting." Cited in Harold Evans, *They Made America* (New York: Little, Brown), 2004, p. 192. Interestingly, Morse also didn't seem to know much of the relevant theory of the day with regard to batteries for electricity; if he had he might have saved himself much time.
18. Ibid., pp. 6-7.
19. Jeremy Rifkin, "This is the Age of Biology," The Guardian, July 28, 2001 http://www.foet.org/global/ BC/This%20is %20the%20age%20of%20biology.pdf
20. Frances Kissling and Sally Satel, "How Marion Barry could help the organ shortage," *Washington Examiner*, March 30, 2009 http://www.washingtonexaminer.com/opinion/columns/OpEd-Contributor/How-Marion-Barry-could-help-the-organ-shortage-42116237.html#ixzz11hMRb3ub
21. Rabinow, *Ibid.*

On *The Body Politic*

An Interview with Jonathan D. Moreno, *University of Pennslyvania*

AP: Others have written on biopolitics, especially from a continental perspective. Those writings often tend to be much more obscure than the typical work in bioethics, and to offer sweeping assertions about all of society, for example, as opposed to suggestions about specific problems and solutions. How have you been able to write on biopolitics, yet still deliver the kind of ethical or political argument that most readers in bioethics are likely to expect?

JM: I don't know that I'm going to provide a view of biopolitics that people in bioethics expect. In fact, if I have, I probably haven't accomplished what I'd hoped to in this book. What I wanted to do is take the premise that pretty much everybody seems to agree is true, that bioethical issues have increasingly become a part of our politics, and a corollary of that premise is that bioethics has become politicized, without defining any of those terms. Just take that intuition and step back and say, "what if that's all true? What does that all mean? Let's try to unpack that intuition, that widespread perception and apply the tools of history and of philosophy of science, of science policy, political theory, American studies, let's try to apply a whole variety of analytic techniques from the social sciences and history, and let's see what we can make of what I call "The New Biopolitics." Your reference to the continental perspective is very apt for me because I think one way to view what I will try to do in *The Body Politic* is as a next step from Foucault, who used the term biopolitics and really popularized the term, though it was around before that.

Foucault's idea of biopolitics was of these measures of what he calls governmentality, a mentality of governance, and that the governance was with respect to control of bodies and of populations. Foucault claimed that this notion of governmentality had intensified for pretty much the last five hundred years or so. Well, Foucault died in the 1980's, and had he lived, he may very well have taken the next step, biopolitics as control of cells, and of tissues, and of the information contained in cells. That seems to me to be where the most intense battles are going to happen in the next decades in biopolitics, they're not necessarily going to be over bodies and populations so much as, what we're seeing in our politics now, is control over cells, and tissues, and the information contained in cells and tissues. For me, the sentinel event, the one that just really signaled this happening, kind of the full crystallizing of biopolitics in this sense, is the stem cell controversy. But even before that, as I describe in the introduction of my book, we have indications of what would happen, starting with the issues that have interested bioethicists since the 1960's, the first bioethicists, they were interested in some of these things. They were interested in cloning, for example. There was a pretty intense debate about cloning in the 70's and early 80's between people like Joseph Fletcher and Paul Ramsey and they took very different views about where biology is taking us as a species. So I reach back to earlier issues in bioethics, before they became intensely politicized.

This is actually a process that has been going on for a while, but, the stem cell controversy took it to a new level because it became partisan and deeply ideological, and, for the first time, you had a biopolitical topic that became an issue for presidential campaigns. That's the drift of one big part of the book, and the other piece of it is the role of biopolitics, particularly in America, and this goes back to my days as a teacher of American Studies. The question of how, as the paradigmatic product of the enlightenment, America views the role of science. And then of course now, even though science has been so important in America, there is a level of unease with the life sciences and that unease is cross-ideological, that is, you'll find people on the left and people on the right who are anxious about what the new biology could do. A large part of the book is about the role of science in America, the role of biology in the American narrative, but also the way that American politics is shifting around these biopolitical issues.

AP: Your approach does sound like a very different approach than what's traditionally been taken in bioethics, how do you expect the bioethics community to react to the book?

JM: That's a great question. In a way, the book is really not addressed so much to the bioethics community, but I hope that they'll see it as a constructive attempt to place the bioethical issues in the larger political, social, and historical context. There's going to be a lot of disagreement about my interpretations, and I understand that, but I hope that they'll see it as an attempt by somebody who has been in the academy and also in the policy world to put the bioethical issues in the larger context. Really, I'm addressing the lay public as much as

any professional group. Let's articulate what seems to be going on with the role of what you might call the politics of biology in our political life. Although I hope my colleagues in bioethics will take *The Body Politic* seriously, I'm actually trying to reach a larger audience than that.

AP: How do you see your book contrasting with the work on biopolitics that is being written by continental scholars who have picked up on Foucault's work in that tradition?

JM: One of my friends, who is a sociologist, when he saw one of the references that I made to Foucault as a philosopher, said "boy your American philosophy colleagues are not going to talk to you any more!" I think there's a rather dismissive view of philosopher-historians like Foucault, certainly in philosophy, and to some extent that's also been true in history, though I know history as a discipline a whole lot less well than I know philosophy. I think that at a 30,000 foot level, Foucault's ideas are useful, and I'm not going to defend him as a philosopher of history, or even as a narrative historian, but I do think that there are these sort of larger ideas that we Anglo-American types could benefit from talking about, that are in the corpus. I take Foucault's ideas as heuristic, they're not the last word, but they're a very provocative set of ideas. The notion of *governmentality* I find especially provocative.

AP: On a similar note, a lot of the contemporary continentals are working on the idea of transhumanism, which you mention in your book. [JM: And British, Australian, and New Zealand as well, and some Americans.] Do you expand on this more? What would an example of a transhumanist stance be? Do you think it has much to offer biopolitics?

JM: One mistake that people make about transhumanism is the notion that all transhumanists necessarily embrace everything that's coming down the pike. I think that's not the case, rather, the first transhumanist proposition, and I say this as someone who doesn't consider himself a transhumanist, is that some profound change is almost inevitable, given the convergence of the life sciences. A change in the nature of what it means to be human is in the offing. That's the proposition that I think that they share. That is, unless we blow ourselves up, that's highly likely. The second question is, will those be good things, or bad things? That's where there is divergence among transhumanists. You have somebody like a Nick Bostrom who takes seriously the risks, or you have somebody like Jay Hughes who is more inclined to emphasize the benefits. I think transhumanism needs to be taken seriously because there is no question that science is powerful, and that it's intensifying and accelerating in its power and its potential, although I do think that there is a great deal of exaggeration, and that the community takes some of the blame for this, the fact that there is some hyperbole, and I don't think that we're very good at all at predicting what the implications will be. I think that the transhumanists have something interesting to say, and, from the point of view of the history of philosophy, they are an extension of what starts with people like Schopenhauer and Nietzsche in the 19th century, so they are in a pretty rich philosophical tradition.

Let me talk about bioconservatives, too. Another analytical point in the book is that when we talk about bioconservatives, we have to distinguish between at least two different flavors. The first is the one that people usually think of, which is the religiously based cultural conservativism, which comes out of, perhaps, conservative Christianity. But there is another flavor, and this flavor could include people from the left as well as the right. A right bioconservative could be somebody who is, for reasons of concern over the loss of important traditions, very concerned about the implications of the life sciences. These are the neoconservatives among the bioconservatives, these folks were the intellectually dominant thinkers in the Bush Administration on the president's council on bioethics. They were not necessarily the explicit religious thinkers, but they take religious tradition very seriously. Then you have the left bioconservatives, you might call them The Greens, and they're also very concerned about this, about undermining human dignity and human equality, true to the life sciences. Their critique is very similar in some ways to that of the neoconservatives. They're very worried about human alienation and commodification, for example, which are concepts that come right out of Marx and Engels, and the Frankfurt School of Critical Theory. In this respect, you have bioconservatives on the left and the right, and you have bioconservatives who have more of a religious interpretation. This is just an example of how biopolitical issues create realignments, and the potential for different kinds of alliances, at least for certain limited purposes, between people who might otherwise disagree about things.

AP: What are your thoughts on groups or movements characterized by a genetic identity, such as Little People of America (LPA), which you mention, and others, such as the neurodiversity movement and the movement toward a deaf community. In what way are these groups raising new questions, rather than reshaping the same concerns that have been with bioethicists since the start of the

discipline? Is it possible, in your view, that we might at some point decide that we're trying to make our conventional systems of ethics do something that they can't, and that we need to radically rethink those systems in light of the value-claims that these emerging groups are making?

JM: It's so interesting that the idea of community has changed so much. In America, we've kind of always struggled with community, from the Puritans who found themselves trying to create a community precariously perched in Plymouth, they try to create a community by convincing themselves that it's so important, for all of Christendom. Then you have the continuous western movement. It was the 19th century philosopher Josiah Royce who brought this up in the gold rush, and his philosophy is a philosophy of community. And then we have these Post- World War II worries about the loss of a sense of community, and in the 1980's this notion of bowling alone, and now we have Facebook and you can create new communities, and you can friend and unfriend, and you have virtual communities. Community is an idea that I don't talk about much in the book, but Americans are kind of obsessed with it. Now, the most technological societies are creating new communities, and Americans are trying to figure out how to do new affiliations, and are affiliating around disease groups. One of the anthropologists I quote points out that they are affiliating around genetic alterations. The Little People of America have not only unified around genetics, but also have been very effective in insisting on a new kind of human rights that partly grows out of their sense of community, which is a biological sense, not only their size, but also their genes. They insist they have the right to pass their genes on to their children if they want to. This is part of the story of community and technology in America that I think is very interesting, the way these dynamics are interacting to create new notions of community.

AP: Do you see parallels between that community and other communities such as the neurodiverse community or the deaf community? Do you see them moving in a similar direction?

JM: There are definitely some similarities. There are those who insist that if they want to have kids with achondroplasia they should be able to, if they want to have children who are deaf like them, they should be able to. Obviously the ethics of this is really complicated. What I'm more interested in is the sociology of this phenomenon, and how science is creating opportunities for people to create new ideas about their rights, new families of rights that we hadn't thought of before.

AP: Do the implications of biopolitics reveal that bioethics has always been deeply involved in science and technology in the life sciences, or in your view do bioethics, and by association, bioethicists, have a bit of catching up to do in light of these new ideas about human rights?

JM: The integration of bioethical discourse into biotechnology is a several-decades old project that shows every sign of intensifying. And it's not only the United States, it's global, especially in countries where we see ourselves as competing in biotechnology. You know, Singapore has long been interested in some form of promoting certain kinds of reproduction and certain kinds of people. And they also are building this new biotechnology base and they've been incredibly successful. This is going to be a struggle that's going to go on for decades and happen at all levels; in government, political organizations and NGO's, and then there's intellectual property which we don't talk about as much as we should. That's going to drive a lot of this, it's going to happen in all sorts of ways. What I've been trying to do in *The Body Politic* is to set up a framework to use to continue to talk about these things.

AP: In most countries where bioethics is discussed, human research is monitored by IRBs, or similar bodies. What do you see as the key challenges that IRB members are likely to face in coming years if the trends that you identify in biopolitics continue?

JM: One of the peculiarities in the IRB system, at least in the United States, they're called REB's in other places, but in the United States, by regulation, IRB's are not supposed to make judgments about the value of a certain kind of science or a certain protocol, or policy judgments. IRB's aren't really the first place I would look, and frankly it didn't even occur to me to think about IRB's even though I've been involved with them for a long time. I don't know that those kinds of activities in mainstream bioethics are the first place to look, I see biopolitics as bubbling up more in advocacy groups and organizations, and with political candidates and think tanks. I think IRB's are often downstream of these things.

AP: Whenever bioethicists gather, at conferences for example, there is usually lively discussion about the promises and perils of mixing philosophy and politics. In particular, there are typically concerns raised about whether a philosophy professor who must answer to elected officials can remain committed to Truth, or whether arguments and conclusions will be overly influenced by the messy, practical realities that politics can often involve. Could you say a bit about where you

stand on this issue?

JM: That's a great question! People in Bioethics think of themselves as both social reformers, introducing informed consent and so on, and I think they've been very successful at doing that, but they also think of themselves as scholars. In the former sense, if you're going to think of yourself as an advocate, you're going to have to take a position. People try to be somehow above the politics, where politics is taken as pejorative, I don't see politics as pejorative, I think it's how people learn to get along without violence. I guess the first answer is politics is not a bad thing. It can be, but it's not always necessary. As social reformers, bioethicists like to be above the fray, and as scholars they like to think of themselves as above the battle, but if you think about fields like English, Economics, Political Science, people who are in those fields as professionals are very political, and yet, when they go to a meeting of the MLA, or the American Economics Association, or the American Political Science Association, they are able to talk to each other in spite of their political activity with outside political associations. Ethicists need, it seems to me, to be able to do that too, but we have a problem because unlike the economists, for example, we don't have a commonly accepted corpus. And so, for example, everybody in economics can agree that The Wealth of Nations is on the short list of what you should read, and that's whether they're on the left or the right, everybody should know The Wealth of Nations. I don't know that we have a similar corpus in Bioethics. I teach The Principles of Biomedical Ethics every chance I can, Beauchamp and Childress, and I think most bioethicists would say that that's a landmark text, but there are some people who consider themselves bioethicists who might be Christian conservative bioethicists, for example, who wouldn't agree with that. This, I think, is one of the problems that we have. I don't see bioethicists getting involved in politics as the problem, I see the problem as the lack of a curriculum that we can all agree on as our field, unlike the economists, unlike the professors of English, unlike the political scientists.

AP: At some level, won't it always be the case that the general public is poorly equipped to understand much of the technicalities involved with scientific developments, so that in a liberal democracy citizens must turn to experts to make decisions about, say, biopolitics? As you say, Americans tend to like science, but learning about science is not especially popular among college students, for instance. Does this suggest that there are two possibilities: either citizens can be persuaded to take a much greater interest in biopolitics, or those with expert knowledge can make decisions about biopolitics that reflect, perhaps crudely, public sentiment?

JM: The data suggests that most Americans like science, but many also think that it moves too fast. And if you dig deeper, there are certain areas where Americans are especially concerned about the rapidity of change, and the life sciences stand out. Greater science knowledge is always a good thing, but it doesn't necessarily mean that everyone's going to end up on the same page. One of the interesting things about, for example, "creation science," is that those people probably read evolutionary biology more closely than I do. Just knowing things doesn't take you in a particular direction. It's a very complicated matter, and, to an extent what I think happens when you ask people whether they believe in evolution or whether they agree with stem cell research, and so forth, is that the answers that you get are more about how these people see themselves as how they see this particular issue. When three of the nine republican candidates in the presidential debate said that they did not believe in evolution, what were they saying? That was not a line-by-line critique of Darwin and the Beagle, it was a statement of who they are, who they identify with, what lifestyle choices they would endorse, so these cutting edge science political issues are often not so much about science as they are about social networks and how people see themselves as a part of one group or another.

AP: You've written in the past on what you call naturalism in bioethics. Is that something that informs this latest book, and if so how?

JM: There is some American Pragmatism in this book when I talk about the American narrative, the way that we see religion and science as a part of the American narrative. Charles Peirce wrote two essays, "The Fixation of Belief," and "How to Make Our Ideas Clear," that are absolutely key to understanding the way that Americans came to think of themselves with respect to science. I think anyone who does history or sociology or cultural history and thinks about the development of values is a naturalist. So I'm happy to embrace that group in this context. When I was a senior in college my honors thesis was on the history of behaviorism from Descartes to Skinner, but it took me thirty years to realize that I was already a naturalist in the way that I viewed the history of science and the emerging values that can be embraced by science. I think that it's definitely in the book, not explicitly, but I think that philosophical naturalism is very comfortable, and, in fact, probably can't avoid trying to understand the origins of ideas in science and religion, and that enriches our philosophical understanding.