INTRODUCTION

In his article in this symposium, Professor Michael Shapiro responds very well to the critiques of bioethics.1 As he observes, standard critiques of the field are misguided or misinformed. Critics either are incorrect in their observations, or they demand more of bioethics than is reasonable.2 According to some writers, for example, it is nice that bioethicists can elucidate valid considerations on both sides of a particular debate,3 but society also needs to know, in the end, what kind of action to take. Professor Shapiro is right in saying that we cannot condemn bioethics simply because it often does not generate clear answers. To the extent that we can fault bioethics for its indeterminacy, we can also fault other academic disciplines like economics, sociology and political science. Moreover, as Professor Shapiro points out, there is an important kind of expertise in improving the quality of our moral reasoning; bioethicists do very much contribute when they indicate how one might legitimately analyze a bioethical dilemma.

Because I generally agree with what Professor Shapiro has written, I will respond to his article by adding to it, rather than detracting from it. But, I should acknowledge that, as someone who characterizes himself as a bioethicist, it is in my self-interest to agree that bioethics is not broken and that bioethical thought is unfairly viewed as lagging behind developments in science and technology.

In making my comments, I want to accomplish two things. First, I will reinforce Professor Shapiro’s defense of bioethics by providing some evidence that bioethical thought anticipates developments in science and technology more than it lags behind them. Or, as Professor Shapiro suggests, it may be more accurate to talk about science and technology catching up with bioethical thought, rather than about bioethics catching up with science and technology.4 Second, I will offer some speculation about why the view persists that bioethics lags behind developments in science and technology despite convincing arguments to the contrary.

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2. See id. at 24-26.
3. Or, as Professor Shapiro observes, bioethicists are quite good at talking the “on one hand . . . on the other hand” talk. See id. at 30.
4. See id.
As a preliminary matter, I begin with a definition of terms. Professor Shapiro quite correctly observes, we can conceive of bioethics lagging behind science and technology in different ways.\(^5\) I will discuss the lagging charge in terms of the idea that we see science and technology come up with important new developments with which our ethical thought is unprepared to deal. That is, according to this version of the critique of bioethics, we learn to do new things before we know whether it is a good idea to do them.

I will now to turn to the first part of my article—evidence that in fact bioethical thought anticipates developments in science and technology more than it lags behind those developments.

I. EVIDENCE THAT BIOETHICS ANTICIPATES DEVELOPMENTS IN SCIENCE AND TECHNOLOGY

In recent years, we have had no shortage of important developments in medicine that raise ethical dilemmas. As these developments occur, it is all too common to hear people say that bioethics is lagging behind, that we are not morally prepared for the dilemmas. Yet, if one looks more closely, it turns out that bioethical thought has, in fact, anticipated developments in science and technology.

For example, consider what some might view as the most stunning development in medical technology in recent years, the announcement in 1997 that Scottish scientists had cloned a sheep, "Dolly."\(^6\) The announcement provoked a flurry of hand wringing and other expressions of concern, and newspapers and magazines were filled with commentary.\(^7\) Had bioethicists not adequately considered the ethical implications of cloning, as many suggested? It turns out that a major academic debate on the morality of cloning was sparked in 1966 by Joshua Lederberg, a Nobel Prize-winning geneticist.\(^8\) Lederberg thought cloning would be a good idea,\(^9\) and the debate was quickly joined by two

5. See id.
prominent ethicists of that generation, Paul Ramsey and Joseph Fletcher, as well as other moral philosophers and ethicists over the ensuing decade.

If one looks at the commentary about cloning between the late 1960s and late 1970s, one sees the same "staking out" of sides that has occurred in the past couple of years. Like many contemporary critics of cloning, Paul Ramsey worried about (1) the unknown medical risks to children born of cloning, (2) the threat to personal identity of children born with very specific expectations as to how they should turn out, and (3) the threat to parenting if people started viewing children as products to be artificially designed rather than persons to be naturally conceived. Other commentators invoked (4) the interest or even the right of people to not be deprived of their unique genetic identity and (5) concerns about the psychological effects on children of cloning from not having a biological father and mother in the way everyone else does. As to the concern that cloning could be abused by authoritarian regimes or mad scientists, one can go back to 1976 and the Boys of Brazil by Ira Levin, or at least as far back as 1932 and Aldous Huxley’s Brave New World, for such an argument.

Arguments in favor of cloning are also not new. Long before Dolly was cloned, we also had already seen (1) emphasis on the importance of procreative autonomy, (2) observations that concerns about psychological harm from cloning are exaggerated and fail to take adequate account of non-genetic sources of personality, and (3) claims for important benefits that might be gained from cloning. For example, writers have noted the ability of parents to avoid passing a genetic disease to their offspring, or the ability of infertile couples to have genetically related offspring rather than children from a mix of their own genes.

[hereinafter Lederberg, BULL. ATOMIC SCIENTIST].


13. See id. at 71-72.
14. See id. at 86-90.


21. See Lederberg, AM. NATURALIST, supra note 9, at 527.
and the genes of outsiders to the marriage.22

The decades-old discussion of cloning is paralleled by a decades-old discussion of genetic engineering.23 We can rest assured that by the time scientists really can manipulate a person's genetic makeup, there will be more analysis of the ethical considerations than most people will have time to read.

We see the same anticipation by bioethical thought of developments in medicine with another leading issue in bioethics, physician-assisted suicide and euthanasia. When Dr. Jack Kevorkian assisted the suicide of Janet Adkins in 1990,24 his action was preceded by repeated controversy over the morality of assisted suicide and euthanasia during the past century. For example, there was a heated debate about euthanasia in this country at the end of the Nineteenth Century and the beginning of the Twentieth Century.25 Notably, the same arguments that commentators make today in favor and against assisted suicide were made a hundred years ago in the debate about legalizing euthanasia. Those favoring euthanasia cited (1) patient self-determination, (2) the importance of relieving patient suffering, and (3) the absence of any moral distinction between euthanasia and other actions by physicians that might hasten a patient's death, like the withdrawal of medical intervention or the administration of palliative drugs.26 Supporters of assisted suicide and euthanasia also argued that (4) we have the ability to limit euthanasia to truly compelling cases without sliding down the slippery slope of abuse.27

In contrast, opponents of euthanasia argued (1) that there is an important moral distinction between active and passive euthanasia, (2) that patient suffering can be relieved without resorting to euthanasia, (3) that legalizing euthanasia would undermine patient trust in physicians, and (4) that the right to die would become a duty to die. Opponents also argued (5) that patients would choose euthanasia in cases when the physician was mistaken about their prognosis28 and (6) that euthanasia would not be limited only to appropriate cases but rather that the disabled would be victimized by legalization of euthanasia.29 Contemporary

23. For some earlier discussions of genetic engineering, see articles reprinted in *ETHICS IN MEDICINE: HISTORICAL PERSPECTIVES AND CONTEMPORARY CONCERNS* 356-393 (Stanley Joel Reiser et al. eds., 1977). For a more recent discussion, see Council on Ethical and Judicial Affairs, American Medical Association, *Ethical Issues Related to Prenatal Genetic Screening*, 3 ARCH. FAM. MED. 633 (1994).
26. See id. at 797-98.
27. See id. at 798.
28. See id.
29. See id. at 798-99. More than 40 years ago, Yale Kamisar wrote a widely cited law review article on "mercy-killing," and he too made many of the same arguments that are made
discussion of physician-assisted suicide adds to the debate in important ways, but one would be seriously mistaken in believing that bioethical thought was unprepared for Dr. Kevorkian.

If it is not in fact true that bioethical thought lags behind developments in science and technology, why is there a persistent myth that the lag exists?

II. REASONS FOR THE MYTH THAT BIOETHICS LAGS BEHIND SCIENCE AND TECHNOLOGY

A. Professional Self-Interest

In some ways, it is in the professional self-interest of bioethicists to maintain the myth that the field of bioethics lags behind developments in science and technology. If we in the field were to forthrightly state that bioethical thought has anticipated scientific developments, then the need for current bioethicists would be diminished. The public would often only need someone to point it to the articles that have already been written. For example, in 1997 when the cloning of Dolly the sheep was announced, President Clinton asked the National Bioethics Advisory Commission to study the ethics of cloning and report back to him in ninety days. Instead of launching their analysis of cloning, members of the Commission might have said, “We don’t need ninety days to prepare our report. In fact, we don’t need really to study the issue at all. Paul Ramsey, Joseph Fletcher and others have done an excellent job debating the morality of cloning over the past thirty years. We can just tell you what they said.”

Consider another example of how bioethicists like to reinforce the idea that bioethical thought is only catching up with developments in science and technology. Bioethicists often speak about the youth of the field of bioethics and how the field had its birth just forty years ago. I suspect that Hippocrates, not to mention Maimonides and Percival, would have been surprised to hear that


31. See Wilmut et al., supra note 6.

32. See Letter from the President, reprinted in CLONING HUMAN BEINGS: REPORT AND RECOMMENDATIONS OF THE NATIONAL BIOETHICS ADVISORY COMMISSION at preface (June 1997).

33. Another leading bioethicist, Albert Jonsen, refers to the birth of bioethics as having occurred in 1947, but he tempers his claim by observing that the field has its roots in earlier thinking. See ALBERT R. JONSEN, THE BIRTH OF BIOETHICS at xii (1998).

34. Moses Maimonides was a noted physician and philosopher, who lived in the Twelfth Century, and is thought by many to have written a prayer that incorporated important principles of
bioethicist's analysis began in the middle of the Twentieth Century. As Professor Shapiro writes, there may be new issues for bioethicists to consider, but the fundamental concepts of moral analysis are hardly novel. We might want to say that the field of bioethics entered adulthood forty or fifty years ago, but not that it was born at that time. Yet, by characterizing bioethics as a very young field, some bioethicists substantiate the view that bioethics has some catching up to do. I think that research scientists also like to reinforce the myth that bioethical thought lags behind developments in science and technology. By doing so, they can avoid responsibility for the moral consequences of their work. They can say something like, "we're just scientists working in a morally neutral way to increase our understanding of human life. It is for others to decide whether this is morally acceptable." If, however, scientists were to acknowledge that some types of technology were considered to be ethically problematic, they would have to explain why they were nevertheless pursuing their research into those technologies.

B. Traditional Neglect of Historical Examples

The persistence of the myth that bioethics lags behind science also reflects the tendency of people generally to overlook historical examples. We like to see our era or our generation as unique. Thus, for example, it is often asserted that physician-assisted suicide has become a major issue in recent years because of advances in medical technology. According to common wisdom, the fact that people today die of chronic, degenerative conditions, like cancer and heart disease, rather than from acute, infectious diseases like pneumonia, and the fact that we have modern machines, like dialysis and ventilators, to prolong life has prompted the desire for ways to end life, to avoid a prolonged dying process.

35. Thomas Percival was an English physician who authored MEDICAL ETHICS in 1803. See JONSEN, supra note 33, at 7.
36. See Shapiro, supra note 1, at 36-37.
37. Even if some scholars are technically correct in saying that bioethics became a distinct academic field 40 or 50 years ago, they create the misleading impression among lay people that bioethical thought began at that time.
38. See, e.g., Robert Marquand, Cloning Bolts Ahead... Toward People?, CHRISTIAN SCI. MONITOR, Jan. 22, 1998, at 1 (quoting Marcel LaFollette, a science-policy expert at George Washington University, "In the laboratory, ... you are supposed to carry the research forward without any regard for questions of what is right and wrong.").
39. With some technologies, it will be the case that they can be used ethically or unethically and that the potential ethical uses would be sufficiently weighty to justify development of the technologies. In such cases, scientists would be entitled to pursue their research and rely on others to implement regulations to channel the technologies in the appropriate direction.
40. See MARILYN WEBB, THE GOOD DEATH: THE NEW AMERICAN SEARCH TO RESHAPE THE
However, as Ezekiel Emanuel has written, assisted suicide has periodically been advocated in western society, and debates much like we have today existed well before the advent of cancer ventilators, cancer chemotherapy, and dialysis. For example, Emanuel quotes a “typical case” from nearly 2000 years ago in Rome:

[Titus Aristo] has been seriously ill for a long time . . . . He fights against pain, resists thirst, and endures the unbelievable heat of his fever without moving or throwing off his coverings. A few days ago, he sent for me and some of his intimate friends, and told us to ask the doctors what the outcome of his illness would be, so that if it was to be fatal, he could deliberately put an end to his life.\(^4^1\)

For just about every development in science and technology, abundant bioethics analysis exists, but people have to make the effort to dig the analysis out of the library.\(^4^2\)

**C. Lack of Societal Interest in Future Possibilities**

A third reason for the perception that bioethics lags behind technology is the natural societal indifference to efforts by bioethicists to anticipate developments in medicine. When scholars write about future possibilities, people are not likely to pay attention. Why worry about something that may never happen?

If I had written an article about cloning ten years ago and sent it off for publication to a medical journal, here is what probably would have happened: If the journal took my article seriously enough to send it out for peer review, a biologist probably would have responded, “This is a well-written, thoughtful analysis of an interesting problem”—what reviewers always say right before they recommend rejection of an article—“but cloning is simply not biologically possible. Once a cell differentiates, it cannot be made to dedifferentiate.”\(^4^3\) The journal would also have sent the article out to a bioethicist for review, and the ethicist probably would have said, “This is a well written, thoughtful analysis of an interesting problem, but there are more pressing issues in bioethics to worry about than cloning. We have too many people not receiving basic health care to worry about health care luxuries like cloning, especially when it’s not even a possibility at this time.” If we are going to blame bioethics for not anticipating ethical dilemmas, then we have to blame ourselves for not being willing to listen when bioethicists try to warn us.

All of the reasons I have given so far are not peculiar to bioethics. One could

END OF LIFE at xxiii (1997).

41. Emanuel, supra note 25, at 793.

42. That bioethical analysis precedes developments in science and technology is not surprising. Major advances in research occur step by step rather than in one big leap. Accordingly, there are almost always early indications of new developments before they are actually achieved.

43. See Lee M. Silver, REMAKING EDEN: CLONING AND BEYOND IN A BRAVE NEW WORLD 96 (1997).
say the same things about other academic disciplines. Economists, political scientists, and other scholars also have incentives to exaggerate the novelty of their work; they also tend to overlook historical examples; and they also are not likely to find interest by others if they write about speculative matters. I suspect, for example, that scholars of ethnic tension between Kosovar Albanians and Kosovar Serbs are finding much more interest in their work now than existed several years ago. If bioethics gets less respect than other academic disciplines, why is that the case?

D. Individual Confidence in the Morality of One's Own Behavior and Thought

Let me introduce what I think is the answer to this question by recounting some of my experience in teaching ethics. I began teaching bioethics several years ago, at schools of both law and medicine, and I preferred teaching bioethics to the law students. They seemed much more interested in delving into the issues.

To illustrate this apparent difference between law students and medical students, I use an example from a medical school class in which we discussed whether women in their fifties and sixties should be using artificial methods of reproduction to have children. I asked one of the students what she thought about the recent announcement of a fifty-nine-year-old woman giving birth, and the student said something like, "I think it's wrong. It's not natural and the woman could have had kids when she was younger." In response, I said something like, "Doctors always do unnatural things, like transplanting artificial heart valves, and maybe the woman did not find the love of her life, the man with whom she wanted to have children, until she was post-menopausal." The student then replied something like, "I don't care what you say, you're not going to change my mind." My law students would not have responded that way, and this episode reinforced my theory that law students are more inclined to grapple with ethical dilemmas than medical students.

But, when I began to teach professional responsibility, or legal ethics, to law students, I found that those students had about the same interest in discussing issues about legal ethics as medical students in discussing matters of medical ethics. Just as most of my medical students seemed to consider bioethics to be a relatively unimportant course in their curriculum, so did most of my law students seem to consider professional responsibility to be a relatively unimportant course. Just as my medical students seemed to be more interested in my teaching them rules of practice rather than how to analyze ethical dilemmas, so did most of my law students seem more interested in the rules of professional conduct than the underlying principles.

So, my new theory is that people are happy to talk about someone else's

44. The issue generated public controversy in 1993 when a clinic in Rome reported that a 59-year-old woman gave birth after using the clinic's services. See William E. Schmidt, Birth to 59-Year-Old Briton Raises Ethical Storm, N.Y. TIMES, Dec. 29, 1993, at A2.
ethics, but not their own. My law students have been more engaged in my bioethics course than in my professional responsibility course because the students focus on the ethics of physicians in bioethics rather than on their own ethics in professional responsibility. Likewise, I suspect that a course on legal ethics at a medical school would be much more interesting to teach than a course on legal ethics at a law school. Medical students would probably have plenty to say about the ethics of lawyers, even if they do not have much interest in hearing about their own ethical obligations.

Why are students more willing to study someone else’s professional ethics? I believe the reason why people do not like to critically analyze their own ethics is that people do not like to think that they ever behave unethically. Rather, they prefer to think of themselves as ethical as the next guy. Few people take affront if they are told that they do not understand quantum physics, pathological processes or the intricacies of the federal tax code. People do take affront, however, if someone tells them that they do not understand how to think or act in an ethical way.

Now, if that is how people feel, it follows that they do not need ethics “experts” to tell them how to behave. If I were to conduct a poll and ask people if they thought they were a non-expert in ethical thinking, I suspect I would get very few people to say that they were. In terms of bioethics, I think people see themselves as being in a kind of Lake Wobegon, “where all the people are above average morally.”

If we all think that we are experts in ethical thinking and behavior, there is hardly a need for a field of bioethics or a profession of bioethics. In this view, bioethicists are like the Wizard of Oz, acting with a good deal of self-importance, but not being able to provide a real service. I suspect that this may be the most important reason why the myth persists that the field of bioethics is somehow deficient.

To be sure, I reject this view. As Professor Shapiro argues so well, thinkers in the field of bioethics have much to offer society. The problem really seems to lie in the reluctance of many members of the public to recognize the assistance that bioethicists can provide society in resolving its ethical dilemmas.

45. Undoubtedly, part of the differences in my teaching experiences can be explained by the fact that some of my courses are elective and some are required. I have taught required bioethics courses in medical schools and required professional responsibility courses in law schools. Conversely, my bioethics courses at law schools are elective courses.

46. When I was Director of the American Medical Association’s Division of Medical Ethics, I noticed a related phenomenon. Physicians were more receptive to guidelines that addressed new ethical issues than to guidelines that called into question existing practices. For example, it was easier to establish guidelines on genetic testing than to restrict the freedom of physicians to treat family members. When existing practices are questioned, it suggests that some people have been acting unethically.

47. In Garrison Keillor’s fictional Lake Wobegon, “all of the men are good-looking, all of the women are strong, and all of the children are above average.” A Prairie Home Companion (NPR weekly radio broadcast).
CONCLUSION

I agree with Professor Shapiro that bioethics is not broken and that it is only a myth that bioethical thought lags behind developments in science and technology. I have argued that this myth reflects a few considerations common to academic fields of inquiry (e.g., the tendency to disregard historical examples) but that it rests primarily in the fact that bioethicists preach their views in an area that is very sensitive for people. It is very difficult to accept the idea that one is not an ethical person, and the idea of an expertise in ethics seems to presuppose the idea that some people are more ethical than others.

How can we respond to social hostility to the idea of bioethics expertise? That is a complicated question that is beyond the scope of this commentary. I will offer one suggestion, however. I suspect that much would be gained if bioethicists were clearer as to the nature of their expertise. To some extent, bioethicists may have contributed to societal skepticism about the value of bioethical thought by misrepresenting their expertise. There is an important difference between claiming expertise in what is right and claiming expertise in the kinds of analysis that can help people determine what is right, and bioethicists have often implied the first when the second is more accurate. That is, when bioethicists suggest that they have a special understanding of what conduct is morally correct, they are on much shakier ground than when they identify their expertise as lying in the process of moral reasoning. By being clearer about their expertise, bioethicists can avoid the tendency to reinforce public skepticism of their field and instead can point the public to a better understanding of their role.

48. Shapiro, supra note 1, at 44-47.