

ARTICLE

Public Reason, Bioethics, and Public Policy: A Seductive Delusion or Ambitious Aspiration?

Leonard M. Fleck

Center for Bioethics and Social Justice, College of Human Medicine, Michigan State University, East Lansing, MI, USA
Email: fleck@msu.edu

Abstract

Can Rawlsian public reason sufficiently justify public policies that regulate or restrain controversial medical and technological interventions in bioethics (and the broader social world), such as abortion, physician aid-in-dying, CRISPER-cas9 gene editing of embryos, surrogate mothers, pre-implantation genetic diagnosis of eight-cell embryos, and so on? The first part of this essay briefly explicates the central concepts that define Rawlsian political liberalism. The latter half of this essay then demonstrates how a commitment to Rawlsian public reason can ameliorate (not completely resolve) many of the policy disagreements related to bioethically controversial medical interventions today. The goal of public reason is to reduce the size of the disagreement by eliminating features of the disagreement that violate the norms of public reason. The norms of public reason are those norms that are politically necessary to preserve the liberal, pluralistic, democratic character of this society. What remains is reasonable disagreement to be addressed through normal democratic deliberative processes. Specific issues addressed from a public reason perspective include personal responsibility for excessive health costs, the utility of a metaphysical definition of death for organ transplantation, and the moral status of excess embryos generated through IVF and/or their use in medical research.

Keywords: democratic deliberation; embryo loss; political liberalism; public reason; Rawls

Introduction

Can Rawlsian public reason sufficiently justify public policies that regulate or restrain medical and technological interventions that are today the focus of much controversy in bioethics (and the broader social world)? Consider, for example, abortion, physician aid-in-dying, CRISPER-cas9 gene editing of embryos, surrogate mothers, preimplantation genetic diagnosis of eight-cell embryos, a range of resource allocation issues, gender reassignment surgery, and so on. Given these examples, what sorts of restrictive policies regarding ethically controversial medical interventions should be judged to be *reasonable* in a liberal, pluralistic society? Put another way, how is it possible for us, citizens in a liberal, pluralistic society, to live peacefully with one another when we have these intense ethical disagreements regarding a proliferating range of novel medical interventions that are seen as being threatening to one or another group's way of life? John Rawls asks, "How is it possible that there may exist over time a stable and just society of free and equal citizens profoundly divided by reasonable religious, philosophical, and moral doctrines?"¹

In the first part of this essay, I want to briefly explicate the central concepts that define Rawlsian political liberalism. Those concepts include equal concern and respect for all persons, a commitment to fair terms of cooperation among social groups with diverse, reasonable comprehensive religious or philosophic views, a commitment to the use of public reason to ameliorate fundamental political disagreements, a commitment to adopting the role of being a citizen when addressing fundamental

political disagreements, and a commitment to protecting the liberal, pluralistic, democratic norms that define the fundamental political structure of our society. In the latter half of this essay, I will demonstrate how a commitment to Rawlsian public reason can ameliorate many of the policy disagreements related to controversial medical interventions at the heart of bioethics today. I emphasize the notion of amelioration as opposed to resolution. The goal of public reason with respect to contentious bioethical disagreements is to reduce the size of the disagreement by eliminating features of the disagreement that violate the norms of public reason. The norms of public reason are those norms that are politically necessary to preserve the liberal, pluralistic, democratic character of this society. What remains is *reasonable disagreement* to be addressed through normal democratic deliberative processes. I will provide several examples of what this might mean in practice.

Elements of Rawlsian political liberalism and public reason

Rawls characterizes his own position as *political* liberalism, as opposed to philosophic liberalism. Philosophic liberalism represents what Rawls describes as a “comprehensive doctrine.” Marxism, Platonism, Hegelianism, Thomism, libertarianism, and so on would all represent comprehensive doctrines as well because they all claim to offer a complete world view informing adherents of what is real, what is true, and how we ought to live (as individuals and in society). The same is true of virtually all religious belief systems, including atheism. All these comprehensive doctrines create social and political divisions and disagreements within a liberal society. Still, so long as these comprehensive doctrines are *reasonable*, and fundamentally supportive of liberal political norms, they are to be politically protected. Advocates for Christian nationalism would represent an *unreasonable* comprehensive doctrine because they would relegate to second-class status (or worse) all non-Christian religious perspectives.² In other words, all public policies would have to reflect explicit Christian values; however, those might be defined. Consider, for example, the differences in belief and practice between more liberal Roman Catholics and more conservative Protestant evangelicals.

Rawls insists that his political liberalism and public reason are *agnostic* with respect to all comprehensive doctrines.³ That is, public reason takes no view at all with respect to the truth claims of every comprehensive doctrine so long as the practical behavioral effects of those truth claims are confined to adherents of that comprehensive doctrine. Thus, Catholic adherents to a Right to Life position may assert that the embryo is a person with a right not to be killed from the moment of conception with the expectation that their adherents will abstain from ever seeking an abortion. A liberal society will tolerate and protect this faith community so long as this community does not attempt to put in place restrictive *public* policies that reflect their view of abortion, as exemplified by the recent Texas law regarding abortion.⁴ That would be illiberal and contrary to public reason because it is sectarian. To illustrate, if a 15-year-old member of that community had become pregnant because of rape, and if her parents sought an abortion for her, that community could not justly forcefully interfere with their effort to obtain an abortion because the encompassing liberal community would want to protect the reproductive rights of that young woman. In other words, members of that faith community have the right to reassess their commitments to any beliefs and practices within that community because they are also members of the broader liberal political community within which that faith community is situated. This ability to change one’s fundamental beliefs and practices is essential to understanding what makes a liberal society liberal.

Practical public reason

Public reason is *practical*.⁵ The primary purpose of public reason is to address a practical policy problem, as opposed to a merely intellectual dispute. Further, this problem must require a public policy response because the protection of rights, liberties, or public interests will be at stake. We can readily imagine diverse social or religious groups arguing about whether there is life after death. Responses to that question might have deep personal meaning to individuals and related social groups whose personal behavior will be shaped by their answer to that question. However, no public policy needs to be

formulated regarding answering that question one way or the other because no public interest is at stake. No society-wide value is threatened by answering that question either way. In contrast, physician aid-in-dying or voluntary euthanasia do require a public policy response of some sort (permissive or restrictive) because a society-wide value would seem to be at stake, namely, deliberately causing the premature death of another person. This is not a mere intellectual or ethical debate. It involves a social practice with consequences in the real world that would seem to violate a widely endorsed social value against taking life. Consequently, a timely policy response is necessary. Endless debate is not an option.

The goal of public reason with respect to any of these bioethical policy debates is to achieve *fair terms of cooperation*, which requires respecting everyone as free and equal citizens, which is to say that the agreements are entered freely, not because of manipulation or coercion. Those agreements will express their shared and public political reason. “But to attain such a shared reason, the conception of justice should be, as far as possible, independent of the opposing and conflicting philosophical and religious doctrines that citizens affirm.”⁶ Rawls describes what he refers to as “public or political reason” as “freestanding,” which is to say that it is not dependent upon any metaphysical or philosophical or religious conceptions.⁷ Public reason is the method for solving fundamental public problems that *citizens as citizens* must embrace to address fundamental political problems. It may be thought of as a common language or a common perspective. Public reason appeals “only to presently accepted general beliefs and forms of reasoning found in common sense, and the methods and conclusions of science when these are not controversial.”⁸

The content of public reason accrues over decades in response to a range of political problems that are the object of political controversy. Rawls writes: “Whether public reason can settle all, or almost all, political questions by a reasonable ordering of political values cannot be decided in the abstract independent of actual cases.... For how we think about a kind of case depends not on general considerations alone but on our formulating relevant political values we may not have imagined before we reflect about particular instances.”⁹ A critical point that Rawls is making here is that public reason does not generate deductive conclusions to our political problems. Getting to conclusions requires actual public deliberation.

Much of the political history of the United States, for example, has involved debates regarding the appropriate balancing of liberty (e.g., the right of capitalists to acquire vast wealth) and equality (e.g., the right of workers not to be reduced to wage slaves). There are thousands of variations of that debate regarding the appropriate balancing of liberty and equality. What Rawls is saying is that there is no abstract generic formula that can be applied to each of those debates to achieve a satisfactory resolution. Instead, all the concrete details of each of those debates need to be addressed. Many different balancings of these competing values will be reasonable and necessary, given the specifics of a particular situation. The same will be true with respect to policy debates related to bioethical controversies. Assume, for example, that privacy rights and liberty rights provide sufficient support for the legalization of voluntary euthanasia. Does that extend to a situation in which an individual has filled out an advance directive for voluntary euthanasia in a situation where he is now incapacitated but at risk for suffering what he does not wish to suffer? Or should euthanasia only be permitted when a person is presently capacitated? Dozens of possible permutations of this question might be considered. This is precisely what we will be doing in the latter portion of this essay as a way of testing the adequacy and utility of public reason.

As noted above, Rawls sees public reason drawing its content from the liberal democratic culture already endorsed and lived by its members. It is a matter of social construction for which there will be many *reasonable* (not true) answers. What is being constructed are the basic structures of society, constitutional essentials, and responses to political problems related to those constitutional essentials, including many of the key policy issues related to bioethical controversies. Keep in mind that constitutional essentials are not created and fully specified at a single point in time (contrary to the views of strict constructionists). What would the right to privacy have meant to the Founders of the United States at the Constitutional Convention in 1787? What would that have meant regarding access to contraceptives? What would our Founders have to say about the scope of procreative liberty, including the use of preimplantation genetic diagnosis or the genetic modification of eight-cell embryos? Should these medical interventions be constitutionally protected, perhaps subject to various degrees of regulation

but not justifiably banned outright? The very asking of these questions makes clear that our Founders could give no thought to these questions but that we would need to be engaged in ongoing construction of reasonable responses to these controversial questions.

Public reason and the role of citizen

Who is the “we” that must be engaged in the construction of reasonable responses to these controversial policy issues through public reason? It is essentially all of us, but in our role *as citizens* in a liberal, pluralistic society. That means we respect one another as free and equal members of this society. If some individuals think of themselves as being superior to everyone else in their status as citizens, as having more rights or stronger rights than everyone else, then those individuals are unreasonable and are not *liberal* members of society. Liberal members of society are committed to fair terms of cooperation, which is essentially a matter of reciprocity. Rawls writes, “Fair terms of cooperation specify an idea of reciprocity: all who are engaged in cooperation and who do their part as the rules and procedures require, are to benefit in an appropriate way as assessed by a suitable benchmark of comparison.”¹⁰ Cooperation is not coercion. Consequently, we rely upon persuasion to achieve mutually acceptable agreements regarding the policies that will bind us all. We forswear all forms of manipulation and deception in the shaping of public policies because such practices are contrary to mutual respect.

Rawls writes, “Public reason is characteristic of a democratic people: it is the reason of its citizens, of those sharing the status of equal citizenship. The subject of their reason is the good of the public: what the political conception of justice requires of society’s basic structure of institutions, and of the purposes and ends they are to serve.”¹¹ Although this may sound harsh and insensitive, public reason must not be contaminated by the private goals or expectations of specific religious groups or advocates for some comprehensive doctrine. The focus of public reason must be *public interests*, interests that each and every citizen in a liberal society has. Recall that public policies always have a coercive element built into them. That element of coercion can be justified only if the goal of the policy is to protect or enhance some public interest, including basic human rights.

The Comstock Act of 1873 was passed by the U.S. Congress, making it a federal crime to sell or distribute contraception through the mail or across state lines. Drafted by Anthony Comstock, a devout Christian known for his crusade against prostitution, pornography and birth control, the statute terms birth control as “obscene.”¹² I take it that this legislation is egregiously illiberal and unreasonable. No obvious public interest is served by such a policy. On the contrary, both liberty interests and privacy interests would be public interests that would be violated by this policy. Still, 24 states followed up passage of the Comstock Act by passing their own severely restrictive legislation regarding access to contraception, Connecticut being among the more extreme. In 1965, the U.S. Supreme Court in *Griswold* handed down the judgment that overturned the Connecticut law, asserting that such a law violated a constitutionally protected right to privacy (though it is liberally problematic that the decision applied only to married couples). Could devout Christians claim to be justly aggrieved, that this decision represented disrespect for their religious beliefs? Could they claim that this decision effectively “gave permission” to less ardent Christians to use artificial contraceptives, contrary to Church doctrine?

At this point, we would ask those devout Christians to put their Christianity in the back of their minds and reflect more thoughtfully on their demands for contraceptive policy from the *perspective of citizens* in a liberal, pluralistic society.¹³ We could encourage them to become reflective in this way with the following thought experiment: Imagine that ardent Islamists in the United States combined with ardent Hindus in the United States to secure the passage of legislation forbidding the manufacture, sale and consumption of pork and beef products, per the requirements of their respective religions. Meat-eating ardent Christians would vigorously object to having such a policy, though they could just as readily be accused of being disrespectful of the religious beliefs of the Islamists and Hindus. They could argue that such a policy was not justified by any public interest, and that this policy would violate their privacy rights and liberty rights. Of course, they would be correct in that judgment, just as non-Christians would be correct in objecting to the Christian anti-contraceptive policy. In order to voice those objections,

however, and expect that they would be taken seriously, these individuals could not be speaking from a Christian perspective. Such a perspective would not reflect public reason. The same would hold true for the Hindus and the Islamists. If adherents of these different religious perspectives wished to live peacefully with one another in a liberal, pluralistic society, then they would have to come to fundamental political agreements with one another *as citizens*, not as members of some religious group.

Being a citizen is a distinct social role with its own rights and responsibilities. It requires putting aside other social roles and identities that might not be compatible with the role of being a citizen charged with seeking reasonable fundamental political agreements. Citizens as citizens are responsible for articulating the details of a political conception of justice, especially in relation to emerging biomedical technologies that are seen as being ethically and politically controversial. Some of that controversy might be attached to specific religious beliefs. Those elements of the controversy will need to be settled within the confines of specific religious communities. From the perspective of a liberal pluralistic society, that would be both rational and reasonable. Some members of that religious community may disagree with some proposed resolution of those controversies within the community. They have the right to voice their disagreement, to act in accordance with their disagreement (practice contraception, eat pork), and to exit the community if the disagreement is profound enough. These are rights that they possess *as citizens* within the broader liberal community that embraces all these distinctive religious (or philosophic) voices. Specific religious communities might not wish to explicitly acknowledge those rights, but those rights are real and enforceable by the more encompassing liberal community. No religious community has the legal right to imprison any of its adherents for uttering heretical statements or for seeking to persuade others to leave that community. Such individuals may be publicly admonished; they may be shunned by other members of the community. They may be excommunicated. But they cannot legitimately have any of their liberty rights or property rights forcefully taken away by that religious group.

Ironically, those very same rights that some religious groups may wish to violate are the very rights that protect the integrity of all these religious communities from invidious discrimination and related political violence. The legitimate expectation within a liberal society is that the adherents of these different religious traditions will all accord one another mutual respect, although, again, this is an expectation that applies to these religious adherents *as citizens*. Within their respective houses of worship, they may all wish to affirm that they alone have the “one, true faith” while everyone else is wallowing in heresy and ignorance. Noteworthy is that no court would ever accept as a legitimate case for adjudication one church seeking an injunction against another church for “falsely asserting” that they alone were the one true religion.

Some number of religious writers will claim that it is both illiberal and unreasonable to expect that an individual’s religious identity would somehow be sequestered from every other social identity that an individual might possess, most especially their identity as a citizen. Nicholas Wolterstorff writes, “It belongs to the religious convictions of a good many religious people in our society that they ought to base their decisions concerning fundamental issues of justice on their religious convictions. They do not view it as an option whether or not to do so. It is their conviction that they ought to strive for wholeness, integrity, and integration in their lives.”¹⁴ Along these same lines, Kevin Vallier writes, “To split an identity is to corner-off the social space in which individuals can act in accordance with their own judgments. Thus, political theories that split identities prevent citizens from acting on their convictions in some vital domain of life. Since activity in that domain (it is assumed) is of great importance, restraint threatens to alienate citizens from their values and principles”¹⁵ (2012, at 157).

However, some reflection will show that these “integrationist views” do not represent a position that most religious advocates would ultimately wish to defend. Imagine a physician, psychological therapist, marriage counselor, or high school teacher using their professional position to proselytize for their religious views. It is difficult to imagine a Roman Catholic or evangelical Protestant accepting with equanimity such behavior by a devout Islamist in any of these roles. Their expectation would be that the Islamist’s religious identity be left outside the clinic or classroom, given the needy and subservient position that patients and students would be in typically. Moreover, all the social roles mentioned here have a public identity inherent in the role. These are individuals serving a public interest in education or health care in whom a public investment has been made. Patients and students are seeking the best advice

and most reliable knowledge available, not something skewed by the provider's religious identity. These expectations clearly do not represent an unjust constraint on the religious identity or religious integrity of these religious individuals. They are free to practice their religion both within the boundaries of their religious community and in numerous social settings so long as their practices do not involve the violation of any fundamental political rights or public interests. Thus, they may pray over a meal in a restaurant (and no liberal citizen would have the right to object), but they may not stand up in that restaurant and demand silence from everyone else for several minutes while they pray.

Bioethical policy controversies and public reason

We now turn to the role of public reason with respect to the creation and legitimation of public policies related to various controversial bioethics issues. Recall that public reason is "free standing." It is agnostic with respect to any truth claims made by any comprehensive doctrines. Public reason is *practical*. Public reason is seeking to identify *reasonable* solutions to controversial social issues that require a public policy response congruent with liberal norms. Public policies are not assessed from the perspective of norms of truth. Those norms apply to knowledge, not practice. There is no one true way to construct an office building, or to design an economic or political system, or to design a medical school curriculum. But there are numerous scientific facts that must be known and respected to carry out any of these practical tasks successfully. Those scientific facts are independent of any comprehensive doctrine, as are the methods of reasoning that generate those facts. There are also methods of reasoning that are integral to common sense, which is to say that there is nothing esoteric about those methods of reasoning. Rawls would also include within public reason widely accepted and "presently accepted general beliefs," what we might refer to as all manner of social understandings regarding what social practices and social policies are fair and reasonable.

What should we see as the broad goals of public reason with respect to any public policies related to various bioethical controversies? I would suggest the following:

- Identify unreasonable policy options (rooted in some comprehensive ideology).
- Identify illiberal policy options.
- Identify self-serving policy options (political, economic, ideological) that fail to respect relevant public interests.
- Identify policy options that would be destabilizing, that would fail to represent fair terms of cooperation among free and equal citizens.
- Identify policy options that disregard or misinterpret scientific facts, or that represent exaggerated (poorly founded) speculations.
- Identify policy options that fail to take seriously value pluralism, that appeal to one dominant value.
- Identify the criteria that must be met by any fair and inclusive process of rational democratic deliberation for choosing among reasonable policy options.

Consider the following disputed bioethical questions to get a clearer sense of what public reason looks like in practice.

Free will and personal responsibility

Do we (public policymakers and citizen-bioethicists) need an account of "free will" in order to address resource allocation decisions related to personal responsibility when, for example, smoking or excessive alcohol use or excessive sun exposure or excessive exercise result in "unnecessary" health costs to others who did not engage in such behaviors? The short answer to this question will be "no." This would require endless debate among policymakers regarding competing comprehensive doctrines regarding "free will."

The practical problem to be addressed regards personal responsibility for the consequences of one's behavior. We can be agnostic regarding the metaphysical status of free will.¹⁶ The practical, political

problem exists because a large group of citizens object to having to pay for “excess” medical costs (increased health insurance premiums) related to poor behavioral choices with alcohol use and “drug abuse” being among the most frequently cited examples of such behavior. From a public reason perspective, this perspective is not unreasonable. It appears as if a serious injustice is occurring. However, over 40% of adult Americans are obese and at significantly increased risk for many costly medical problems, including cancer, stroke, heart disease, diabetes, and so on. In addition, hyper-athletic individuals generate numerous costly sports injuries that nonathletic, nonobese folks will pay for, though many of those folks will be skiers, or drive too fast, or refuse to wear masks or refuse vaccines at the height of the Covid epidemic—all of which have resulted in “accidents” with costly (unjust) consequences for others.

What I am describing here are the beginnings of a public reason political conversation that appeals to ordinary facts and ordinary modes of reasoning that all are capable of understanding. In addition, we could add to the conversation some medical and scientific information related to diminished responsibility, that is, regarding addiction, mental illness, or other brain disorders. Some nonobese citizens might still want “something to be done” regarding medical costs associated with obesity. We might then ask whether they wanted food police stationed at grocery stores with authority to seize non-healthy foods shoppers were trying to purchase. We might also consider “deputizing” primary care physicians to monitor and report on the health status of their obese patients. These would be obvious violations of the privacy rights and liberty rights of individuals for which there would be no reasonable public justification. No doubt, protecting the health of citizens is a reasonable public value. However, it is not a supreme value. In a liberal society, there are no supreme values. Individuals are free to sacrifice some of their personal health in many circumstances for other things they value.

What I want to illustrate, however succinctly, is that no complex or esoteric forms of philosophic reasoning are necessary for a fruitful, practical conversation that relies upon the resources of public reason, including the norms integral to political liberalism. What I suspect would be the ultimate result of this conversation would be recognition of the fact that virtually all of us have been or will be responsible for costly health problems that, in theory, could have been avoided if we were willing to accept asceticism as a way of life, or if we took the pursuit of health as a pre-eminent value that took priority over all other social values. Further, if we tried to allocate “fairly” excess, responsibility-laden health costs proportionately, that would require unreasonable and unjustified violations of privacy rights to acquire the information needed to make those micro-judgments of cost allocation, such as information gleaned from primary care physicians. Further, if we are honest with ourselves, virtually all of us have made numerous unhealthy choices that have had health consequences, the costs of which have been absorbed by others. Mutual forgiveness and mutual toleration would seem to be necessary to avoid the risks of illiberal policies aimed at parceling out good health responsibility.¹⁷ The other relevant factor that needs recognition is brute bad luck regarding our health. Consider bad genes in an environment supportive of bad gene expression, sneaky viruses and bacteria, devastating natural events, wars, ice in winter, bad drivers, misleading medical information, and so on. The flip side of this is good luck regarding our health, which would not deserve praise.

Brain death and public reason

Do we (public policymakers and citizen-bioethicists) need a metaphysically complete account of death in order to justifiably deny additional ICU care for a patient declared dead or to transplant organs from that patient to another patient? Again, the short answer to this question will be negative. Many novel medical interventions have had the effect of disrupting our normal phenomenal experiences of life and death. This is clearly what happened when the notion of “brain death,” or death determined by neurologic criteria, was first introduced. Patients declared dead on that basis looked like they were still alive because their breathing and cardiac functions were artificially sustained since the brain was no longer capable of doing that. For most lay people, this was difficult to understand and accept. The explanations of the medical community were often met with incredulity.

However, what was really at stake was our ability to do major, life-saving organ transplants, which required (ethically) that the donor be dead, that is, permanently incapable of engaging in any of the activities that define life because their brain function had completely ceased. This was a practical issue that had to be addressed. If citizens imagined themselves or their loved ones at risk of premature death due to major organ failure, and if they recognized that a major organ transplant could give them extra years of life, then they would have to endorse as ethically reasonable and legal the neurologic conception of death. This is a reasonable public interest because very few of us would be willing to accept benignly our premature death if there were a medical option that would prevent that. That possibility requires individuals to agree to be organ donors if they were faced with certain medical circumstances, and it also requires a public policy that legitimates this option. That donation option is entirely voluntary, as required by our liberal commitments related to personal autonomy. Under such circumstances, no fundamental rights are violated, or unjust harms imposed upon anyone.

There are religious groups profoundly opposed to the notion of brain death and organ donation for transplantation based on death. Those groups would include Native Americans, several Muslim groups, Confucians, Shintoists, and some Orthodox Jewish groups.¹⁸ Their views are adequately respected by not requiring them to be either organ donors or organ recipients. Clearly, if they were a majority, that would not justify their putting in place laws that would outlaw organ transplants that involved brain dead patients. Such a law would not satisfy any public interest. The interest satisfied would be sectarian, tied directly to a comprehensive doctrine that was illiberal and unreasonable.

I return to a point made earlier. Public reason is practical and evolves by addressing practical problems, not abstract theoretical issues. To illustrate, recent medical research has shown that there are often nests of neurons firing away in the brains of individuals declared brain dead. Does that mean these patients are not “really dead,” and may not be used as organ donors?¹⁹ This is a practical ethical issue. Assume we have medical certainty (not absolute certainty) that such patients will not be resurrected, that is, restored to any level of functioning. That could be a future possible for me. Would I want my “life” sustained in that condition? Would I want a social policy requiring that? Would I think of myself as being seriously harmed if a social policy did not protect those nests of neurons in me? Alternatively, that future possible me might need instead a heart transplant from such an individual. Would I want a policy that would deny me that option? This is a snippet of the sort of conversation that would characterize public reason and bioethics. Either choice would be reasonable, that is, no basic liberal values would be violated. I would think the more permissive choice would be preferable because individuals with exaggerated hopes regarding that nest of neurons could simply refuse to sign the back of their driver’s license. Their organs would not be taken, though they would still be declared dead.

Again, individuals sign the back of their driver’s license indicating their willingness to be organ donors, but families in many states can refuse to consent to those organs being taken. Should families be allowed to override the wishes of such patients? This is another practical and ethical issue for public reason. As citizens who agreed to be organ donors, what would we imagine the public interest would be that would justify giving the family of a deceased individual the right to override their wish in this regard? Maybe those family members have other religious commitments. However, it would seem to be illiberal to allow their religious commitments to be a justified basis for overriding the will of a patient who did not share those commitments. Of course, we can turn the scenario around. An individual refuses to be an organ donor for their religious reasons. They are now diagnosed as being brain dead. This time, a relative says they want that person to be an organ donor, contrary to that patient’s earlier expressed wishes. If religious individuals find that objectionable, they will have to find equally objectionable, for reasons of ethical consistency, a religious person overriding the organ donation wishes of a nonreligious or differently religious person.

Again, the need for donated organs far exceeds the supply available. Should we in the United States adopt an “opt out” policy, as in many parts of Europe, to ameliorate that shortfall? In other words, individuals would have to sign a document stating they refused to be organ donors, or else their organs would be available for transplant purposes in the relevant medical circumstances. This is another practical ethical challenge for public reasons. In other words, would any liberal values be violated by

such a policy choice? Alternatively, would there be a liberally legitimate public interest that would justify such a policy? Would there be anything unreasonable about such a policy?²⁰

The point I want to emphasize here, as Rawls would, is that no metaphysical, philosophical, or religious issues need to be resolved in order to provide a reasonable answer to any of the above questions. The fundamental questions that citizens as citizens must answer are as follows: Is it reasonable to permit and encourage opportunities for organ transplantation? Does this represent a public interest? Would any liberal values speak against permitting this medical procedure? What is reasonable to do in order to expand the supply of transplantable organs? Would it be liberally permissible with parental permission to take the organs of anencephalic infants (not dead on the basis of neurologic criteria) to save the lives of other infants at risk for organ failure? Such infants have some (nonfunctional) brain matter.²¹ What about other infants with gross brain deformities incompatible with significant life outside the womb? Would it be liberally permissible to take the organs of patients in a persistent vegetative state [PVS] with family permission to save the lives of many other patients at risk of premature death? What if the patient herself had given such permission in an advance directive in anticipation of the possibility of ending up in PVS? Clearly, such patients are not dead on the basis of neurological criteria, but neither will they ever have a human experience again. Should we see this as something noble to be socially supported? Or would this represent a dangerous precedent? Some number of commonly recognized, liberally legitimate, social values, rights, and obligations would need to be weighed and balanced to create reasonable policies to resolve these issues. There are limits to what we may permissibly do in a liberal, pluralistic society by way of expanding the supply of organs for transplant. However, those limits are not given, either divinely or by our Founding Fathers. They need to be constructed by citizens in accordance with public reason.

Embryos, persons, and public reason

Do we (public policymakers and citizen-bioethicists) need a philosophically complete account of what is required in order to determine whether an entity is a person with a right not to be killed? Is that necessary in order to determine whether embryos can be used in medical research, whether IVF and preimplantation genetic diagnosis should be legally permissible medical options (given the excess number of embryos created in these procedures), whether any genetic modification of embryos ought to be legally permissible, and whether abortions should be permitted or forbidden under all/some/no circumstances? From a public reason perspective, the answer to all these questions will be negative.²²

Various religious groups will regard the embryo as a person because it has a soul from the moment of conception, is sacred, or (more philosophically) is a rational substance.²³ However, all these descriptors are attached to comprehensive doctrines that cannot provide a reasonable justification for restrictive policies regarding the creation or destruction (use) of these embryos. Recall that public reason is agnostic with respect to the truth claims of all these comprehensive doctrines. Anti-abortion advocates are free to believe that the embryo is a person with the same moral rights as you and I. They are free to believe that the destruction of either embryos or fetuses is the ethical equivalent of murder, but that belief and the expected behavioral acceptance of that belief must be confined to that community of believers, as opposed to being the basis for public policies that would constrain the behavior of those who were not part of that community and who did not regard the embryo as a person with fundamental moral rights.

For the purposes of this essay, I wish to put aside all the complexities associated with the abortion issue. I will concentrate instead on policy issues related to human embryos. Numerous practical considerations require this focus. Roughly, 15% of couples are unable to conceive a child through normal sexual intercourse. Since 1978, the option of IVF has been available to them. Roughly, 70,000 babies are born each year in the United States through IVF, and more than one million since 1978.²⁴ This may be seen as both a personal good and a social good. However, IVF requires, as a practical medical matter, the administration of a drug to a woman that will cause her to hyperovulate, perhaps harvesting 10 to 15 ova and having them inseminated to yield multiple embryos. Excess embryos are frozen in liquid nitrogen for future use or eventual discarding by the parents. It is estimated 500,000 of these frozen embryos presently exist in the United States. What should be the legal status of these embryos?

Given a post-*Roe* world in which some states have written into law that a person exists from the moment of conception, what are the implications of such laws for parents and clinicians associated with infertility treatment? Must they cease providing such treatments? Or must they harvest only one ovum at a time with the increased medical risks that would pose to a woman, given that the average successful pregnancy will require at least three attempts? Are the parents and clinicians obligated to sustain indefinitely the “lives” of all those frozen embryos?²⁵ How should such laws be assessed from the perspective of public reason?

We can begin to answer that last question by noting that the language used by the state of Mississippi in the law at issue in the *Dobbs* decision described the fetus (and presumably the embryo) as an “unborn human being.”²⁶ There is nothing religious about that language. The implication of that language is that this unborn human being has a right not to be killed, which reflects the rhetoric of Right to Life advocates that abortion is murder.²⁷ To say the least, this represents an extraordinarily expansive conception of the legal notion of murder. If this is taken seriously, then the obvious implication is that IVF would be outlawed if it involves producing multiple embryos. Likewise, all medical research involving embryos would have to be outlawed as well. Is an outcome such as that reasonable in a liberal, pluralistic society? Of course, if this were really murder in a very clear sense, those conclusions would be reasonable.

Recall that public reason is free-standing and *practical*. What this means is that our actual social practices ought to match appropriately our moral and legal judgments. If the embryo is an unborn human being with a right not to be killed (and presumably a right to be provided life-saving aide if in mortal peril), then some dramatic changes in social practices would be necessary. Recall the philosopher’s example (still a very appropriate part of common-sense reasoning) of the researcher in the lab with her 5-year-old daughter and a nitrogen tank with a thousand frozen embryos. A horrific fire breaks out. She can only save either her daughter or the tank with the thousand frozen embryos. What is she ethically obligated or permitted to do?²⁸

The most ardent Right to Life advocates, as well as everyone else, will agree that saving the daughter is the right thing to do. However, this seems entirely inconsistent with the view that each of those thousand embryos represents an unborn human being. This means that a thousand lives are sacrificed that could easily have been saved in exchange for saving one other human life. If saving the daughter is the right choice to make, the clear moral and legal implication would seem to be that there is a very significant difference between a born human life and an unborn human life. The latter has much less in the way of moral and legal status.

Many people are bothered by philosopher examples. It is easy enough to switch to the real world. As noted above, there are about 500,000 frozen embryos in storage around the United States. If these are all unborn human beings, could that status quo simply be accepted with equanimity? If they were kept in frozen storage for 70 years (as if that were a frozen orphanage), it would be absurd to take moral comfort in believing that those frozen embryos had now achieved an average life expectancy. They would have had no life expectancy at all; they would have experienced nothing. As a practical matter, they would be dead all those years. What are the alternatives?

All those embryos “belong” to the couples who conceived them in vitro. They could be returned with the requirement that they would have to be implanted in the uterus of the woman who assisted in bringing them into existence. This would be a forced pregnancy, clearly at odds with the fundamental principles of a liberal society. Alternatively, these embryos could be “farmed out” to any other women willing to become pregnant with one or more of these embryos (unborn human beings). It is easy to imagine that most of the couples who had assisted in creating those embryos as part of their IVF procedures would object to having those embryos appropriated for that purpose. Again, any such appropriation would be clearly contrary to the fundamental principles of a liberal society.²⁹

We might imagine Right to Life advocates claiming that leaving these embryos in frozen storage represented unborn human being abuse. Again, from a common-sense experiential perspective, this would represent an enormous conceptual stretching of the concept of abuse. What is scientifically clear is that embryos have no capacity for sentience because they are lacking an actual nervous system.

Consider another relevant scientific fact that few lay people are aware of, namely, the embryo loss problem. It is estimated that 40–60% of all conceptions that occur fail to result in the birth of a baby.³⁰ A

large majority of those conceptions fail to implant in the uterus; the remainder end with spontaneous abortion, usually in a brief period after implantation. If there are four million births annually in the United States, this means that more than six million unborn human beings are dying under the benign language of embryo loss. Right to Life advocates ought to see this as a very substantial loss of human life every year, a problem worthy of serious political attention and resource allocation aimed at saving those lives.³¹ The reality is that no such level of concern has emerged among those advocates, which would seem to indicate that this embryonic loss is not the ethical equivalent of the death of six million babies at birth.

The most recent medical research would indicate that there are multiple reasons for this embryo loss. In some cases, the embryos are genetically malformed, which may prevent successful implantation. In other cases, there may be biological deficiencies in the uterine lining that causes embryo loss. In the abortion literature that has addressed this issue, the embryo loss has been written off (ethically speaking) as an unfortunate natural event for which there is no moral blame. Some writers have sought to separate off from the abortion discussion the issue of embryo loss by noting that these embryos (unborn human beings) were not killed. Instead, the worst that can be said is that they were “allowed to die” because we did not bring aide to them. That is, we made no effort to figure out why this was happening and what might be done to prevent that loss of embryonic life. The most common argument of these writers in defense of indifference to this loss is that we either have no duty to bring aide in these circumstances, or that there are better uses for the resources necessary to bring aide and to save these embryos.³² In either case, the practical implication would seem to be that these embryos that perish are not entitled to equal concern and respect, as we might expect if these embryos really are unborn human beings. Further, it is one thing to fail to bring aide to children in faraway lands in complicated political circumstances, it is quite another to fail to bring aide to our own future possible children, which is the status ascribed to these embryos by Right to Life advocates.

Let us return for a moment to the notion of the embryo as an unborn human being. That language is intended to convey the notion that an entity is there with the same rights I have as a human being. Put in other words, the implication is that “I” am there as a human embryo. I always see surprised looks on the faces of my students when I tell them “I” was never a human embryo. I want to contend that this is a scientific fact. The DNA that is in every one of my cells today is the same DNA that was there in the embryo that eventually became me as a baby. But “I” am not my DNA. “I” came to be only gradually through the acquisition of consciousness and self-consciousness, through acquiring language, through complex social relationships, and through experience of the world. If the embryo that ultimately resulted in me as a baby had been destroyed for some reason, “I” would not have been destroyed. “I” would not have been harmed. “I” would simply never have come to be. The scientific reasoning explained in this paragraph may not be something that most people would have had occasion to think about. However, it does explain why the embryo loss described above is not seen as a horrendous moral tragedy by ordinary reasonable citizens. It also explains our practical intuitions and lack of moral outrage regarding the embryos in frozen storage from IVF as well our endorsement of the researcher who saves her daughter rather than a thousand frozen embryos.

What I want to emphasize is that none of the discussion above is attached to any comprehensive doctrine. As required by public reason, it is free-standing. It is a product of scientific facts, common sense reasoning, and various sorts of practical experiences along with widely endorsed reasonable public values. It is congruent with the fundamental commitments of a liberal, pluralistic society. Consequently, it would be illiberal if any laws were passed that would outlaw IVF, or the use of IVF along with preimplantation genetic diagnosis as a way of identifying and discarding embryos that would otherwise be afflicted with serious genetic disorders that would result in diminished life expectancy and quality of life. Likewise, it would be illiberal and negligent with respect to embryonic well-being if all medical research with embryos were outlawed, keeping in mind the medical need to better understand embryonic development and the medical reasons related to embryo loss, especially in the case of women who seem incapable of initiating or sustaining a pregnancy.

I return to a point made earlier. Public reason is about reasonableness and finding reasonable resolutions to complex bioethical problems that require a policy response. A reasonable resolution is

one that all reasonable persons can accept (not necessarily endorse). The discussion above may have created the impression that embryos and very early-stage fetuses have virtually no value at all so far as public reason is concerned, that anything at all can be done with embryos because they do not have rights and cannot be harmed. However, that would be an unreasonable conclusion.

There are the emerging issues associated with the genetic editing of embryos, especially embryos, future possible children, that would be at risk of serious genetic disorders, such as cystic fibrosis or hemophilia. The research itself is ethically reasonable because of the good that might be accomplished. However, the research should be subjected to stringent research protocols, most especially if any embryos that have been genetically modified are to be implanted in the womb with the expectation of a completed pregnancy. Introducing genetic changes into an eight-cell embryo is a very complex process. Many things can go wrong because of what is not completely understood when DNA is manipulated through insertion or deletion of genetic material. It would be unconscionable to imagine trying many ways of inserting or deleting genetic material into such embryos, then implanting them to see what the results are in the baby that is born. This is a judgment that is not attached to any comprehensive doctrine. It is a judgment that is perfectly congruent with public reason. Given the potential serious risks associated with such genetic manipulation for that future possible child, it would be ethically imperative that we have near medical and scientific certitude that any such genetic modifications in an embryo will not result in serious harm to a future possible child.³³

Note that in insisting on such strict standards, and public policies that reflect those standards, no one is saying that the reason for the strict standards is not that the embryo is a person with a right not to be harmed. Rather, the strict standards are necessary when that embryo is created with the intent that this embryo will become a future possible person with the same rights as every other human person. The excess embryos created during IVF in frozen storage or the excess embryos used in very basic embryonic research, are not created or used with the intent to bring about a future possible child. Consequently, these are practices that should continue to be permitted as liberally reasonable. No future possible person is harmed because there is no intent to bring about a future possible person.³⁴ By way of contrast, this is the reason why a pregnant woman is open to justified moral criticism if she ingests substances that can cause harm to that fetus that is intended to become a future possible child. This is also the reason why a pregnant woman with an advanced cancer requiring aggressive chemotherapy will be strongly counseled to abort the pregnancy (assuming a relatively early stage) in order to prevent damage to that fetus (future possible child) that might result in a severely abbreviated life for that child with significant diminishment in the quality of the life available.³⁵

Conclusion

Numerous bioethical controversies have emerged in our society as a result of emerging medical technologies, such as IVF and preimplantation genetic diagnosis of eight-cell embryos. Some of these controversies might be left to private moral judgment or to judgment within a religious community. Others, however, require a public policy response because fundamental rights and liberties, or public interests, seem threatened in what is a liberal pluralistic society. How should those disagreements be addressed so that peace and stability in that society are maintained as well as mutual respect and fair treatment of all? Rawls contends that a liberal, pluralistic, democratic society ought to rely upon public reason, as he articulates that notion, to yield reasonable, practical public policies that would address such controversies. In this essay, I have tried to show what that ought to look like with respect to three contemporary bioethical issues. I have only tried to lay out the major conditions that must be satisfied in order to have effective public deliberation with regard to these three problems, given a commitment to the fundamental norms that define a liberal pluralistic society committed to equal concern and respect for all its citizens. I have only provided a rough sketch of how a public conversation regarding those three problems might begin. My objectives have been modest. Rarely is it the case that there will be only one rational and reasonable policy option for addressing any of these controversial issues in bioethics that require a public policy response. That is why there must be actual public deliberation in which a range of

reasonable, liberally legitimate policy options are assessed by participants who understand and accept the fact that they must function as citizens in those deliberations. This is an ideal worthy of pursuit, given the public chaos, disrespect, ignorance, and irrationality that otherwise threaten a democratic society.

Notes

1. Rawls J. *Political Liberalism*. New York: Columbia University Press; 1996:xxvii.
2. Miller PD. What is Christian Nationalism? *CT: Christianity Today* 2021 Feb 3; available at <https://www.christianitytoday.com/ct/2021/february-web-only/what-is-christian-nationalism.html> (last accessed 30 Jan 2024).
3. See note 1, Rawls 1996, at 9–11.
4. See Simmons-Duffin S, Webber D, Martin M. 5 things to know about the latest abortion case in Texas. *NPR* 2023 Dec 13; available at <https://www.npr.org/sections/health-shots/2023/12/13/1218953788/texas-abortion-ban-supreme-court-kate-cox> (last accessed 27 Jan 2024). Texas has three abortion laws in place. One would ban abortions from the moment of conception. Another would ban abortion after a fetal heartbeat (6 weeks). In the case of Kate Cox, 20 weeks pregnant with a Trisomy-18 fetus (Edwards syndrome), the law would permit an abortion if the mother's life were threatened by the pregnancy. This would seem to be a medical judgment, which was provided to Kate Cox. However, the Texas Supreme Court took it upon themselves to override medical judgment with their legal insight and ideological blinders.
5. See note 1, Rawls 1996, at 9–10.
6. See note 1, Rawls 1996, at 9.
7. See note 1, Rawls 1996, at 10.
8. See note 1, Rawls 1996, at 224.
9. See note 1, Rawls 1996, at liii.
10. See note 1, Rawls 1996, at 16.
11. See note 1, Rawls 1996, at 213.
12. Kennedy L. Reproductive rights in the US: Timeline 2023 13 July; available at <https://www.history.com/news/reproductive-rights-timeline> (last accessed 28 Jan 2024).
13. Much of the material in the next several paragraphs is drawn from my earlier work. *Bioethics, Public Reason, and Religion*. New York: Cambridge University Press; 2022:9–12.
14. Audi R, Wolterstorff N. *Religion in the Public Square: The Place of Religious Convictions in Political Debate*. Latham: Rowman and Littlefield; 1997:105.
15. Vallier K. Liberalism, religion, and integrity. *Australasian Journal of Philosophy* 2012;**90**(1):149–65, at 157.
16. Robert Sapolsky would be a very strong critic of the concept of free will. You can accept everything he says in his book but then go on to make all the ordinary judgments of responsibility that are part of life today. See his book, *Determined: A Science of Life Without Free Will*. New York: Penguin Press; 2023.
17. The succinct arguments here are presented in greater detail in my essay "Fleck LM. Whoopie Pies, Super-Sized Fries: "Just" Snacking, "Just" Des(s)erts. *Cambridge Quarterly of Healthcare Ethics* 2012;**21**(1):5–19.
18. See National Kidney Foundation, Religion and Organ Donation 2023; Religion and Organ Donation | National Kidney Foundation (last accessed 28 Jan 2024).
19. Biel S, Durrant J. Controversies in brain death declaration: Legal and ethical implications in the ICU. *Current Treatment Options in Neurology* 2020;**22**:12–6. doi:10.1007/s11940-020-0618-6; See also Joffe AR, Khaira G, deCaen AR. The intractable problems with brain death and possible solutions. *Philosophy, Ethics, and Humanities in Medicine* 2021;**16**:11–38. doi:10.1186/s13010-021-00107-9 (last accessed 29 Jan 2024).
20. Some recent research suggests that an "opt out" policy will not necessarily assure a successful increase in organ donation. Hospital culture will make a difference as well. Also, some research suggests that it

- might be a bad idea to deny a family the right to refuse taking their loved one's organs for transplantation. The emotional costs might be very high. How much weight should that be given in formulating an appropriate public policy? This is the sort of research Rawls would see as a necessary part of public reason and the public conversations necessary for formulating reasonable policies. See Bea S. Opt-out policy and the organ shortage problem: Critical insights and practical considerations. *Transplantation Reviews* 2021;35. doi:10.1016/j.trre.2020.100589 (last accessed 28 Jan 2024).
21. See, for example, Byrne P, Canadian Pediatric Society Bioethics Committee. Use of anencephalic newborns as organ donors. *Pediatrics & Child Health* 2005;10(6):335–7. Ultimately, they are opposed to taking the organs of anencephalic infants.
 22. This negative conclusion would be endorsed by Blumenthal-Barby J. The end of personhood. *American Journal of Bioethics* 2024;24(1):3–12. She writes: “This paper argues that at best the concept of “personhood” is unhelpful to much of bioethics today and at worst it is harmful and pernicious. I suggest that we (bioethicists) stop using the concept of personhood and instead ask normative questions more directly (e.g., how ought we to treat this being and why?) and use other philosophical concepts (e.g., interests, sentience, recognition respect) to help us answer them. It is time for bioethics to end talk about personhood.” There are twenty-three commentaries that reflect a considerable array of responses to this article.
 23. Several writers defend the rational substance view regarding the moral status of the embryo from conception onward. In brief, the claim is that an embryo is a rational substance, just like you and me. As such, it possesses the same intrinsic moral worth as you and me. See Friberg-Fernros H. A critique of Rob Lovering’s criticism of the substance view. *Bioethics* 2015;29(3): 211–6; Friberg-Fernros H. Hit but not down: The substance view in light of the criticism of Lovering and Simkulet. *Bioethics* 2018;32(6):388–94.
 24. Fox M. A million babies have been born in the US with fertility help. *NBC New* 2017 Apr 28. A million babies have been born in the U.S. With Fertility Help (nbcnews.com) (last accessed 28 Jan 2024).
 25. Letterie G, Fox D. Legal personhood and frozen embryos: Implications for fertility patients and providers in post-Roe America. *Journal of Law and the Biosciences* 2023;10(1). doi:10.1093/jlb/lsad006 (last accessed 29 Jan 2024).
 26. *Dobbs v. Jackson’s Women’s Health Organization*, 597 U.S. [2022]; available at https://www.supremecourt.gov/opinions/21pdf/19-1392_6j37.pdf (last accessed 29 Jan 2024).
 27. Georgia is seeking to put in place a fetal personhood law, which would claim that an embryo was a person from the moment of conception with a right not to be killed. Zernike K. Is a fetus a person? An anti-abortion strategy says yes. *New York Times* 2022 Aug 21; available at <https://www.nytimes.com/2022/08/21/us/abortion-anti-fetus-person.html> (last accessed 30 Jan 2024).
 28. In the literature this is known as the “embryo rescue case.” It has been widely discussed. The basic aim of the case is to demonstrate that even the most ardent anti-abortion advocates accept the loss of numerous embryos in order to save a little girl. One critic of that argument is Liao M. The embryo rescue case. *Theoretical Medicine and Bioethics* 27;2006:141–7; See also note 23, Friberg-Fernros 2018. The basic argument by these writers is that abortion is a matter of killing while the embryo rescue case is about allowing to die. Hence, they see it as a poor analogy.
 29. Lovering will argue that the frozen embryo adoption argument shows the absurdity of contending that the embryo is a person from the moment of conception. See Lovering R. A moral argument for frozen human embryo adoption. *Bioethics* 34;2020:242–51. A response to Lovering is Blackshaw BP, Colgrove N. Frozen embryos and the obligation to adopt. *Bioethics* 34;2020:857–61.
 30. Wilcox AJ, Harmon Q, Doody K, Wolf D, Adashi EY. Preimplantation loss of fertilized human ova: Estimating the unobservable. *Human Reproduction* 2020;35(4):743–50; See also Ma J, Gao W, Li D. Recurrent implantation failure: A comprehensive summary from etiology to treatment. *Frontiers in Endocrinology* 2023. doi:10.3389/fendo.2022.1061766. There is a considerable amount of medical literature around this issue, the goal being to better understand the biological reasons for this occurring in order to help women struggling to become pregnant. The earliest discussion of this issue

occurred in 1975 in an article by Roberts and Lowe. They estimated the embryonic loss rate to be about 78%. Today that number is generally regarded as being too high. The more likely range is 40–60%. Roberts CJ, Lowe CR. Where have all the conceptions gone? *The Lancet* 1975;**305**(7905):498–9. I may have been the first philosopher/ bioethicist to pick up on the ethical implications of this fact for Right to Life advocates, who have generally dismissed such embryonic loss as a matter of ethical concern. See Fleck LM. Abortion, deformed fetuses and the Omega pill. *Philosophical Studies* 36;1979:271–83.

31. See Ord T. The scourge: Moral implications of natural embryo loss. *American Journal of Bioethics* 2008;**8**(7):12–9.
32. See Anderson ML. Anti-abortionist action theory and the asymmetry between spontaneous and induced abortions. *Journal of Medicine and Philosophy* 2023;**48**:209–24; See also Delaney J. Embryo loss and moral status. *Journal of Medicine and Philosophy* 2023;**48**:252–64; Blackshaw BP, Rodger D. The problem of spontaneous abortion: Is the pro-life position morally monstrous? *The New Bioethics* 2019;**25**:103–20.
33. The mountain of justified criticism that emerged after Jiankui He engaged in such editing illustrates my point. See Savulescu J. The fundamental ethical flaw in Jiankui He's alleged gene editing experiment. *Ethics in the News* (blog). Published November 28 2018; available at <http://blog.practicaethics.ox.ac.uk/2018/11/the-fundamental-ethical-flaw-in-jiankui-hes-alleged-gene-editing-experiment/>; See also Liu S. Legal reflections on the case of genome-edited babies. *Global Health Research and Policy* 2020;**5**. doi:10.1186/s41256-020-00153-4 (last accessed 30 Jan 2024).
34. Hendricks will disagree with the argument I offer here, basically suggesting that intentions can change multiple times in the course of a pregnancy, but that should not alter the wrongness of killing a fetus through abortion. Hendricks P. Even if the fetus is not a person, abortion is immoral: The impairment argument. *Bioethics* 2019;**33**:245–53.
35. Suran M. Treating cancer in pregnant patients after *Roe v Wade* overturned. *JAMA* 2022;**328** (17):1674–76.