

## EPILOGUE

### Embryo Ethics: The Stem Cell Debate

IN OPPOSING GENETIC ENHANCEMENT, I have argued against the one-sided triumph of mastery over reverence, and have urged that we reclaim an appreciation of life as a gift. But I have also argued that there is a difference between healing and enhancing. Medicine intervenes in nature, but because it is constrained by the goal of restoring normal human functioning, it does not represent an unbridled act of hubris or bid for domination. The need for healing arises from the fact that the world is not perfect and complete but in constant need of human intervention and repair. Not everything given is good. Smallpox and malaria are not gifts, and it would be good to eradicate them.

The same can be said of diabetes, Parkinson's disease, ALS, and spinal cord injuries. One of the most promising new sources of hope for people afflicted with these conditions is stem cell research.

Scientists may soon be able to extract stem cells from an early embryo and grow those cells to study and cure degenerative diseases. Critics object that extracting the stem cells destroys the embryo. They argue that if life is a gift, then research that destroys nascent human life must surely be rejected. In this chapter, I offer a defense of embryonic stem cell research and try to show that the ethic of giftedness does not condemn it.

#### STEM CELL QUESTIONS

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In the summer of 2006, well into the sixth year of his presidency, George W. Bush exercised his first veto. The bill he rejected involved not a familiar Washington issue like taxes or terrorism or the war in Iraq, but the more arcane subject of stem cell research. Hoping to promote cures for diabetes, Parkinson's, and other degenerative diseases, Congress had voted to fund new embryonic stem cell research, in which scientists isolate cells capable of becoming any tissue in the body. The President refused to go along. He argued that the research is unethical because deriving these cells destroys the blastocyst, an unimplanted embryo at the sixth to eighth day of development. The federal govern-

ment, he declared, should not support “the taking of innocent human life.”<sup>1</sup>

The President’s press secretary could be forgiven his confusion. In explaining the veto, he stated that the President considered embryonic stem cell research to be “murder,” something the federal government should not support. When the comment drew a flurry of critical press attention, the White House retreated. No, the President did not believe that destroying an embryo was murder. The press secretary retracted his statement, and apologized for having “overstated the President’s position.”<sup>2</sup>

How exactly the spokesman had overstated the President’s position is unclear. If embryonic stem cell research does constitute the deliberate taking of innocent human life, it is hard to see how it differs from murder. The chastened press secretary made no attempt to parse the distinction. He was not the first to become entangled in the ethical and political complexities of the stem cell debate.

The debate over stem cell research poses three questions. First, should embryonic stem cell research be permitted? Second, should it be funded by the government? Third, should it matter, for either permissibility or funding, whether the stem cells are taken from already existing embryos left

over from fertility treatments or from cloned embryos created for research?

The first question is the most fundamental and, some would say, the most intractable. The main objection to embryonic stem cell research is that destroying a human embryo, even in its earliest stages of development, and even for the sake of noble ends, is morally abhorrent; it is like killing a child to save other people's lives. The validity of this objection depends, of course, on the moral status of the embryo. Since some people hold strong religious convictions on the question, it is sometimes thought that it is not subject to rational argument or analysis. But that is a mistake. The fact that a moral belief may be rooted in religious conviction neither exempts it from challenge nor renders it incapable of rational defense.

Later in this chapter I will try to show how moral reasoning about the status of the embryo can proceed. But to prepare the way, I turn first to the question of whether there is a moral difference between the use of "spare" or "excess" embryos left over from fertility treatments and the use of cloned embryos created for research. Many politicians believe that there is.

## CLONES AND SPARES

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To this day, the United States has no federal law that prohibits cloning a child. This is not because most people favor cloning as a new means of reproduction. To the contrary, public opinion and almost all elected officials oppose it.

But there is strong disagreement about whether to permit cloning to create embryos for stem cell research. And the opponents of research cloning have so far been unwilling to support a separate ban on reproductive cloning, as Britain has enacted.<sup>3</sup> In 2001, the House of Representatives passed a bill that would have banned not only reproductive cloning but also cloning for biomedical research. The bill did not become law because Senate supporters of stem cell research were unwilling to accept the blanket ban. As a result of this stalemate, the United States has no federal law against human reproductive cloning.

The debate over cloning brought out two different reasons for opposing the use of cloned embryos in stem cell research. Some people oppose research cloning on the grounds that the embryo is a person. They maintain that all embryonic stem

cell research is immoral (whether on cloned or natural embryos), because it amounts to killing a person to treat other people's diseases. This is the position of Senator Sam Brownback of Kansas, a leading advocate of the right-to-life position. Embryonic stem cell research is wrong, he argues, because "it is never acceptable to deliberately kill one innocent human being in order to help another."<sup>4</sup> If the embryo is a person, then harvesting its stem cells is morally analogous to harvesting organs from babies. In Brownback's view, "A human embryo . . . is a human being just like you and me; and it deserves the same respect that our laws give to us all."<sup>5</sup>

Other opponents of research cloning do not go that far. They support embryonic stem cell research, provided it uses "spare" embryos left over from fertility clinics.<sup>6</sup> They are troubled by the deliberate creation of embryos for research. But since in vitro fertilization clinics create many more fertilized eggs than are ultimately implanted, some people argue that there is nothing wrong with using those spares for research. If the excess embryos would be discarded anyway, they reason, why not use them (with donor consent) for potentially life-saving research?

To politicians looking for a principled compromise in the stem cell debate, this position holds considerable appeal. Since it would sanction the use only of excess embryos, it would seem to overcome moral qualms about creating embryos for the sake of research. This position was defended in the Senate by Majority Leader Bill Frist of Tennessee, the Senate's only physician, and in Massachusetts by Governor Mitt Romney, who unsuccessfully urged his legislature to adopt it. Both supported stem cell research on leftover embryos created for reproduction, but not on embryos created for research.<sup>7</sup> The stem cell funding bill voted by Congress (and vetoed by President Bush) in 2006 also made this distinction; it would have funded stem cell research only on embryos left over from fertility treatments.

Beyond its appeal as a political compromise, this distinction seems morally defensible as well. On closer examination, however, it does not hold up. The distinction fails because it begs the question of whether the "spare" embryos should be created in the first place. To see how this is so, imagine a fertility clinic that accepts egg and sperm donations for two purposes—reproduction and stem cell research. No cloning is involved. The clinic creates

two groups of embryos, one from eggs and sperm donated for the purpose of IVF, the other from eggs and sperm donated by people who want to advance the cause of stem cell research.

Which group of embryos may an ethical scientist use for stem cell research? Those who agree with Frist and Romney are left in a paradoxical position: They would permit the scientist to use spare embryos from the first group (since they were created for reproduction and will otherwise be discarded) but not from the second group (since they were deliberately created for research). In fact, Frist and Romney have both sought to ban the deliberate creation of embryos in IVF clinics for purposes of research.

The paradoxical scenario brings out the flaw in the compromise position: Those who oppose the creation of embryos for stem cell research but support research on IVF “spares” fail to address the morality of *in vitro* fertilization itself. If it is immoral to create and sacrifice embryos for the sake of curing or treating devastating diseases, why isn’t it also objectionable to create and discard spare embryos in the course of treating infertility? Or, to look at the argument from the opposite end, if the creation and sacrifice of embryos in IVF is morally

acceptable, why isn't the creation and sacrifice of embryos for stem cell research also acceptable? After all, both practices serve worthy ends, and curing diseases such as Parkinson's and diabetes is at least as important as treating infertility.

Those who see a moral difference between the sacrifice of embryos in IVF and the sacrifice of embryos in stem cell research might reply as follows: The fertility doctor who creates excess embryos does so to increase the odds of a successful pregnancy; he does not know which embryos will ultimately be discarded, and does not intend the death of any. But the scientist who deliberately creates an embryo for stem cell research knows the embryo will die, for to carry out the research it is necessary to destroy the embryo. Charles Krauthammer, who favors stem cell research on IVF spares but not on embryos created for research, put the point sharply: "The bill that would legalize research cloning essentially sanctions . . . a most ghoulish enterprise: the creation of nascent human life for the sole purpose of its exploitation and destruction."<sup>8</sup>

This reply is unpersuasive, for two reasons. First, the claim that creating embryos for stem cell research amounts to creating life *for the purpose* of exploiting or destroying it is misleading. The de-

struction of the embryo is, admittedly, a foreseeable consequence of the act, but the purpose is curing disease. Those who create embryos for research no more aim at destruction or exploitation than those who create embryos for fertility treatments aim at discarding spares.<sup>9</sup>

Second, although fertility doctors and patients do not know in advance which of the embryos they create will wind up being discarded, the fact remains that IVF, as practiced in the United States, generates tens of thousands of excess embryos bound for destruction. (A recent study found that some 400,000 frozen embryos are languishing in American fertility clinics, with another 52,000 in the United Kingdom and 71,000 in Australia.)<sup>10</sup> It is true that, once these doomed embryos exist, “nothing is lost” if they are used for research.<sup>11</sup> But whether they should be created in the first place is as much a policy choice as whether to permit the creation of embryos for research. German federal law, for example, regulates fertility clinics and prohibits doctors from fertilizing more eggs than will be implanted at any one time. As a result, German IVF clinics do not generate excess embryos. The existence of large numbers of doomed embryos in the freezers of U.S. fertility clinics is not an unalter-

able fact of nature but the consequence of a policy that elected officials could change if they wanted to. So far, however, few of those who would ban the creation of embryos for research have called for a ban on the creation and destruction of excess embryos in fertility clinics.

Whoever is right about the moral status of the embryo, one thing is clear: Opponents of research cloning cannot have it both ways. They cannot endorse the creation and destruction of excess embryos in fertility clinics, or the use of such embryos in research, and at the same time complain that creating embryos for research and regenerative medicine is morally objectionable. If cloning for stem cell research violates the respect the embryo is due, then so does stem cell research on IVF spares, and so does any fertility treatment that creates and discards excess embryos.

Those, like Senator Brownback, who take a consistent stand against the use of embryonic human life are right at least to this extent: The moral arguments for research cloning and for stem cell research on leftover embryos stand or fall together. It remains to ask whether they stand or fall. This takes us to the basic question of whether any embryonic stem cell research should be permitted.