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BETTING THE FARM: WHAT CLONING ADVOCATES REALLY WANT

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SYNOPSIS

For years now, advocates of embryonic stem cell research have flatly denied any intention of implanting cloned embryos into volunteer mothers to harvest tissues or organs from later-term fetuses—a practice known as *fetus farming*. Researchers are growing impatient, however, because stem cells from early-term embryos have yet to deliver even one promised cure, and their tendency to form dangerous tumors could render them therapeutically useless. There is concern throughout the scientific community that usable cells will not be obtained unless cloned embryos can be gestated well past the embryonic stage. Fearing a public backlash, advocates of fetal stem cell research are deceptively trying to legalize fetus farming through a series of phony cloning bans, such as a New Jersey bill that became law in 2004. In each case, what is banned is the *birth* of cloned human beings, not their *creation* for destructive research. Further, cloning advocates are busy telling Americans that cloning is not cloning, that embryos are not really embryos, and that some humans are not really persons.

Anyone who thinks cloning technology will remain in the petri dish should revisit January 4, 2004, when then New Jersey governor James McGreevey signed into law the most permissive stem cell legislation in the United States, Senate Bill 1909. Residents of the Garden State were told they were getting an anticloning bill. It was anything but that.

The New Jersey law makes it legal in that state to create a cloned embryo, implant it in a woman's womb, then gestate it through the ninth month of pregnancy—so long as the embryo is killed before birth, the point at which it magically becomes “a new human individual.”¹ Thanks to the new law, there is nothing to stop researchers from cultivating later-term (cloned) fetuses for spare parts—a process known as *fetus farming*. In short, New Jersey's alleged anticloning law not only fails to ban cloning, but it sets the stage for fetus farming at taxpayer expense.

The New Jersey law “has blown the cover off of the true agenda of the biotechnology industry,” says Wesley J. Smith, author of *Culture of Death: The Assault on Medical Ethics in America* (Encounter Books, 2001) and *The Consumer's Guide to a Brave New World* (Encounter Books, 2004). “Rather than restricting therapeutic cloning to the harvesting of stem cells from early embryos, as the industry often pretends in the media, the Biotechnology Industry Organization's enthusiastic support of the New Jersey bill proves that [pro-cloning types] want an unlimited license to harvest cloned human life from inception through the ninth month.”²

HARVESTING THE UNBORN

Leading pro-life advocates share Smith's concern. “The New Jersey legislation expressly encourages human cloning for, among other things, the harvesting of ‘cadaveric fetal tissue’ [i.e., tissue from dead

fetuses]" writes Robert P. George of Princeton University and a member of the President's Council on Bioethics. "The bodies in question are those of fetuses created by cloning specifically to be gestated and killed as sources of tissues and organs."³ New Jersey Right to Life's Marie Tasy says, "This law will allow human lives to be treated as a commodity, creating classes of lesser humans to be created and sacrificed for the good of humanity."⁴

At the same time, the legislation expressly permits "reasonable payment" for "removal, processing, disposal, preservation, quality control, storage, transplantation, or implantation of embryonic or cadaveric fetal tissue."⁵ Put simply, nothing in the legislation prevents cloning entrepreneurs from paying women a "reasonable" fee to gestate later-term fetuses that will be killed for their body parts. Nine other states are considering similar laws.

Douglas Johnson, legislative director for National Right to Life, says we are headed toward using fetuses for spare parts. "Elements of the biotech industry are definitely moving toward fetus farming and Congress must act to prevent that before it's too late."⁶

BIGGER IS BETTER

In September 2005, the scientific journal *Nature* published new research suggesting that embryonic stem cells might be procured without creating, then destroying, living human embryos.⁷ Altered Nuclear Transfer (or ANT) is a new technology that seeks a morally acceptable means of producing *pluripotent* stem cells (i.e., multipotential cells that are the functional equivalent of embryonic stem cells) without the creation and destruction of human embryos. Researchers, instead of using living human organisms, would use biological entities that have properties similar to human embryos, but are not living organisms.⁸

This should have come as thrilling news for everyone in the cloning debate, but advocates of embryonic stem cell research were anything but thrilled. Despite their talk about promised cures, they knew there were many problems with treatments derived from these cells.

First, embryonic stem cells, though allegedly more flexible than their adult counterparts in terms of what kind of tissue they can form, were hard to control once implanted. They sometimes formed tumors instead of usable tissue. Second, the cloning procedures needed to produce embryos for research were extremely expensive. Smith points out, the National Academy of Sciences claims "it could take about 100 human eggs per patient—at a cost of \$1,000 to \$2,000 apiece—just to derive one cloned embryonic-stem-cell line for use in regenerative therapy."⁹ If true, it would be next to impossible to secure the billions of human eggs needed for widespread therapeutic cloning. Further, even if the biotechnology could be developed, "it would either be available only to the super rich or so costly that it would have to be stringently rationed."¹⁰ Third, as of July, 2005, noncontroversial adult stem cells were treating 65 known diseases while their embryonic counterparts were treating none, leading some scientists to wonder if embryo cells had any therapeutic value whatsoever.¹¹ Fourth, prospective investors failed to supply the cash for research that, in their view, was highly speculative and might not cure anyone for years to come, if at all. Finally, a burst of new research indicated that cloning technology might never yield substantial treatments unless cloned humans were developed well past the embryonic stage.¹²

Advocates of embryonic stem cell research, until recently, have flatly denied any intention of implanting embryos in order to harvest tissues or organs from later-term fetuses. Robert George thinks, however, that their response to ANT points toward a different agenda: full-fledged fetus farming. "Based on the literature I have read and the evasive answers given by spokesmen for the biotechnology industry at meetings of the President's Council on Bioethics, I fear that the long-term goal is indeed to create an industry in harvesting late embryonic and fetal body parts for use in regenerative medicine and organ transplantation."¹³

George's concerns are well founded. Experiments are already underway in which cloned cow embryos are implanted, gestated to the early or late fetal stage, then killed so that their organ tissues can be harvested.¹⁴ Cells extracted from later-term fetuses are stable, which benefits researchers by allowing

them to get around the tumor problem associated with embryo cells. “We hope to use this technology in the future to treat patients with diverse diseases,” said Robert Lanza, who coauthored one of the cow studies.¹⁵ Legally, he has a green light; the New Jersey law, and others styled after it, permit this same cloned organ farming to be done in humans.

While the legislative debate rages on, four troubling developments within bioethics are clearing the way for the brave new world of fetus farming. Each development is visibly present in the current debate over embryonic stem cell research.

1. JUNK SCIENCE: POLITICS OVER TRUTH

In a February 2006 *New York Times* op-ed piece, Michael Gazzaniga, the director of the Center for Cognitive Neuroscience at Dartmouth College and member of the President’s Council on Bioethics, chided President Bush for allegedly misstating the facts about cloning: “Calling human cloning in all its forms an ‘egregious abuse’ is a serious mischaracterization. This makes it sound as if the medical community is out there cloning people, which is simply not true. The phrase ‘in all of its forms’ is code, a way of conflating very different things: reproductive cloning and biomedical cloning.”¹⁶

How are these things different? Gazzaniga’s alleged distinction between “reproductive cloning” and “biomedical cloning” is totally misleading because *all* cloning is reproductive. So-called *reproductive* cloning simply means allowing the cloned human to be born alive. *Biomedical* (or therapeutic) cloning means creating him for research, but killing him before birth. In either case, *the act of cloning is exactly the same* and results in a living human embryo. I’ll say more about this below, but the important point here is that a cloned human being is created when the nucleus is removed from a human egg and replaced with genetic material from a donor. Once this occurs, the act of cloning is complete. After that, the only question is how will we *treat* the cloned human being—kill him for research or allow him to grow and develop?

Gazzaniga replies that although adults and children are human beings, cloned embryos are mere “hunks” of cells in a petri dish. This is sloppy science. Living human embryos are not mere hunks of cells, but distinct, self-integrating organisms capable of directing their own physical maturation as members of the human species. Maureen Condic, assistant professor of neurobiology and anatomy at the University of Utah, explains the important distinction between clumps of cells and whole human embryos that Gazzaniga overlooked:

The critical difference between a collection of cells and a living organism is the ability of an organism to act in a coordinated manner for the continued health and maintenance of the body as a whole....Embryos are not merely collections of human cells, but living creatures with all the properties that define any organism as distinct from a group of cells; embryos are capable of growing, maturing, maintaining a physiologic balance between various organ systems, adapting to changing circumstances, and repairing injury. Mere groups of human cells do nothing like this under any circumstances.¹⁷

Senators Diane Feinstein (D-CA) and Orrin Hatch (R-UT), cosponsors of a pro-cloning measure in the U.S. Senate, meanwhile, have taken junk science to a whole new level. Both insist that the embryos in question are not human organisms, but eggs(!)¹⁸ or stem cells¹⁹ that have the potential to become human beings. This is simply not true. Embryos are not mere eggs; they are living human beings—tiny human subjects that don’t *come from* stem cells but *have* stem cells, and extracting these cells is lethal for them. To say anything different is not science but politics.

If politics can explain away the human nature of embryos, however, it will have no problem explaining away the human nature of fetuses. All we need are a few promised cures.

2. STEALTH CLONING AND PHONY BANS

The relationship between fetus farming and cloning is clear. First, cloning (theoretically) provides a rich supply of embryos that can be grown to the fetal stage where organs can be harvested. Second, cloning allows researchers to derive these organs from a fetus that genetically matches the patient, thus

minimizing the potential for organ rejection. The bottom line is that you cannot pursue fetus farming unless you first sell the public on embryo cloning. The problem, however, is that when the public is asked directly whether tax dollars should be used to clone human embryos for destructive research, a majority says *No!*²⁰

Fearing public backlash, advocates of embryonic stem cell research, including those in the biotechnology industry, are slyly trying to legalize cloning with a series of phony bans. Known more accurately as “clone and kill” laws, these alleged “bans” allow human embryos to be cloned provided they are destroyed for medical research prior to birth.

Shocking though it may seem, some “pro-life” advocates support these bills. In Missouri, for example, former Republican senator John Danforth is honorary co-chair for the Missouri Stem Cell Research and Cures Initiative (sponsored by the Missouri Coalition for Lifesaving Cures), a ballot measure that would amend that state’s constitution to allow embryonic stem cell research permanently. Danforth assures us that he is solidly “pro-life,” has “always voted pro-life,” and that the initiative “respects the sanctity of life”; however, misleading cloning language is all over the group’s “Setting the Record Straight” fact sheet and other documents on their Web site.

The fact sheet, for example, states that the initiative “clearly and strictly bans human cloning.”²¹ Their “Frequently Asked Questions and Answers” section, however, contains this baffling statement: “We believe that ALL [emphasis in original] types of stem cell research should be pursued in the effort to find lifesaving cures, including research involving adult stem cells, Somatic Cell Nuclear Transfer (SCNT) and stem cells from excess fertility clinic embryos (also called blastocysts or pre-embryos) that would otherwise be discarded. We also believe that human cloning should be banned.”²² Several paragraphs later, SCNT is defined as “a process that uses a patient’s own cell and an empty, unfertilized egg to create ES [embryonic stem] cells.”²³

The deception here is breathtaking. First, SCNT *is* cloning and Danforth knows it. (A decade ago, this exact same technique gave us “Dolly,” the first cloned sheep.) The process begins when a scientist removes the nucleus from a mature, unfertilized human egg (an *oocyte*) and replaces it with donor DNA. Chemicals are then added and a spark of electricity (scientists hope) jolts the cell into dividing and growing into a cloned human embryo. At this point the act of cloning is complete and we are faced with a choice—nurture the embryo until it is born or destroy it for research. What Danforth’s Missouri Cures proposal strictly forbids is the *birth* of a cloned human being, not its *destruction* for medical research.

Second, there is no such thing as a “pre-embryo.” Cloning advocate and Princeton University biology professor Lee Silver points out that the misleading term is used to fool the public deliberately into accepting destructive embryo research and cloning: “I’ll let you in on a secret. The term pre-embryo has been embraced wholeheartedly by IVF [in vitro fertilization] practitioners for reasons that are political, not scientific.”²⁴

Third, SCNT does not make embryonic stem cells from unfertilized eggs. It creates living human embryos that researchers will destroy so that they can *get* stem cells.

Just when you thought the deception couldn’t get worse, the site also states that the Missouri Cures initiative “resolves concerns about human cloning by strictly banning human *reproductive* [emphasis added] cloning to create babies.”²⁵ Let’s be clear: cloning is cloning, period! As mentioned above, the alleged distinction between “therapeutic” cloning and “reproductive” cloning is completely misleading because all cloning is reproductive. In each case, what is banned is the *birth* of cloned human beings, not their *creation* for destructive research. New Jersey’s clone bill, for example, was sold to the public as a strict prohibition on human cloning, but with a hidden lethal twist: that so-called strict prohibition was simply that all cloned embryos and fetuses *must* be killed before they have a chance to develop into more mature human beings. California law bans initiating a pregnancy with a cloned embryo, but only if that pregnancy “could result in the *birth* [emphasis added] of a human being.”²⁶ In other words, human lives may be created with cloning technology if and only if technicians agree—under threat of legal penalty—to destroy any clones *prior to birth*. That is the proposed ethical safeguard that allegedly bans cloning. It’s a sham.²⁷

Pro-life advocates, moreover, do not oppose the destruction of cloned human embryos because it kills “babies”; rather, we oppose it because it unjustly takes the life of a defenseless human being, regardless of his or her stage of development. The fact that Danforth and a sympathetic press pretend otherwise is shameful, but not surprising.

“The mainstream media still discusses these issues as if scientists only want to use embryos left over from IVF procedures,” writes Smith. “But those days are long, gone. It is now undeniable that Big Biotech and its politician and university allies do not even intend to restrict biotechnological research to early embryos situated in petri dishes.” The bills in New Jersey and these other states clearly demonstrate that “the ground is being plowed already to allow cloned fetal farming, the next, but certainly not last, step intended to lead us to a Brave New World.”²⁸

3. ALLEGED MORAL NEUTRALITY

In a 2005 *New York Times* editorial, Danforth writes that government restrictions on embryonic stem cell research (put plainly, on the practice of cloning human embryos for destructive research) wrongly impose a particular religious view on a pluralistic society: “It is not evident to many of us that cells in a petri dish are equivalent to identifiable people suffering from terrible diseases...the only explanation for legislators comparing cells in a petri dish to babies in the womb is the extension of religious doctrine into statutory law.”²⁹

Danforth’s claim that pro-life advocates who are opposed to embryonic stem cell research provide no rational defense for their position is simply incorrect. They do provide a rational defense. The problem is that Danforth, like others who make this claim, never engages the sophisticated *philosophical* case that pro-life philosophers present in support of the humanity of the embryo.³⁰ He cannot bring himself to answer a basic pro-life argument—one based on science and philosophy—even at the popular level. Scientifically, pro-life advocates contend that from the earliest stages of development, the unborn are distinct, living, and whole human beings. True, they have yet to grow and mature, but they are whole human beings nonetheless.³¹ Philosophically, pro-life advocates argue that there is no morally significant difference between the embryo you once were and the adult you are today. Differences of size, development, and location are not relevant in the way that advocates of embryonic stem cell research need them to be. Pro-life advocates do not need Scripture or church doctrine to tell them these things. These are truths that even atheists and secular libertarians can recognize, and sometimes do.³²

Nowhere in his editorial does Danforth present a principled argument that explains why pro-life advocates are mistaken on these points. He appeals to neutrality, but this does not help. The nature of the debate over embryonic stem cell research is such that *both* positions are based on a metaphysical view of human value (i.e., a view of the value of human beings apart from any of their physical characteristics or attributes), and therefore the pro-research position that Danforth defends is not entitled to win by default.³³ The question is not which position has an underlying metaphysical view and which does not, but which underlying metaphysical view is correct.

The view underlying the pro-life position is that humans are intrinsically valuable in virtue of the kind of being they are. True, they differ immensely with respect to talents, accomplishments, and degrees of development, but they are nonetheless equally valuable because they share a common human nature. Their right to life comes to be when they come to be, either at conception or at the completion of a cloning process. The view underlying Danforth’s pro-research position is that humans have value (and hence, rights) not in virtue of the kind of thing they are—*human* organisms—but only because of an acquired property that comes to be *after* they come to be, later in the life of the human organism. The early embryo does not appear (to him) to be a human being with rights, therefore, destructive research is permissible.

Notice that Danforth is doing the abstract work of metaphysics—he is using philosophical reflection to defend a disputed view of human value in his quest to defend embryonic stem cell research. Put simply, Danforth’s attempt to disqualify the pro-life position from public policy based on its alleged metaphysical underpinnings works equally well to disqualify his own position.

In the end, it is hard to see how Danforth's case for moral neutrality would not also justify the destruction of later-term fetuses. For example, during a 2004 presidential debate, Senator John Kerry defended his own record on abortion (which includes his refusal to vote against grisly partial-birth abortion procedures) with language similar to Danforth's: "First of all, I cannot tell you how deeply I respect the belief about life and when it begins. I'm a Catholic, raised a Catholic. I was an altar boy. Religion has been a huge part of my life....But I can't take what is an article of faith for me and legislate it for someone who doesn't share that article of faith, whether they be agnostic, atheist, Jew, Protestant, whatever. I can't do that."³⁴ Presumably, stabbing late-term fetuses in the head and sucking out their brains is a mere preference issue, something we should no more restrict than our right to choose chocolate ice cream over vanilla.

4. PERSONHOOD PROPAGANDA

In his *New York Times* article, Gazzaniga attacks President Bush's cloning policy as follows: "The president's view is consistent with the reductive idea that there is an equivalence between a bunch of molecules in a lab and a beautifully nurtured and loved human who has been shaped by a lifetime of experiences and discovery....DNA must undergo thousands if not millions of interactions at both the molecular and experiential level to grow and develop a brain and become a person."³⁵

Notice the unsupported claims here. Why should we suppose that brain development bestows value on a human? As usual with pro-cloning advocates, Gazzaniga does not tell us why development matters, nor does he say why certain value-giving properties are value-giving in the first place. True, he later appeals to one's immediate capacity to experience memories, loves, and hopes, but isn't that begging the question, since the issue is whether one is a human subject even if one does not have memories, loves, and hopes? Newborns lack all of these qualities, so does it follow that they, too, are fitting subjects for destructive research?

Gazzaniga further says that it squares with our basic intuitions to accept that adults and children are people while clumps of cells in a petri dish are not: "Look around you. Look at your loved ones. Do you see a hunk of cells or do you see something else?...We do not see cells, simple or complex—we see people, human life. That thing in a petri dish is something else. It doesn't yet have the memories and loves and hopes that accumulate over the years."³⁶

The idea that a human becomes a person only after some degree of physical development amounts to saying, "I came to be after my body came to be," or, "I inhabit a body that was once an embryo." Gazzaniga does not defend this metaphysical assumption that personhood is an accidental (or nonessential) property rather than something intrinsic (or essential) to the human subject.

Gazzaniga's appeal to our intuitions—"these embryos don't look like your relatives" (my paraphrase)—is naïve, though I agree that some people will not be impressed with a two-week-old human embryo. For them, it is counterintuitive to suggest that something the size of a small dot is a human being. (One hundred and fifty years ago, incidentally, many people also thought it counterintuitive to suggest that black slaves were human.) Many others, however, experience a very different intuition when they consider that same embryo, one that tells them we should protect and not harm the weakest members of the human family, regardless of their body size, location, or degree of development. The question now becomes, which intuition is correct, the pro-lifer's or the pro-cloner's?

Merely describing our feelings about something will never resolve a conflict between two competing intuitions. We must go back to the evidence. What do the facts of science say? The facts say that from the earliest stages of development, the unborn are distinct, living, and whole human beings. In short, intuitions are not infallible, though we are justified believing them until presented with superior evidence. In this case, Gazzaniga's appeal to intuition does not refute the strongly evidenced claim for the humanity of the embryo; it merely sidesteps it.

Princeton University philosopher Peter Singer is correct: Once society accepts that human beings have value only because of some acquired property such as self-awareness, there remains no logical reason to exclude only embryos. Fetuses and newborns will also lose their right to life.

WHAT CAN BE DONE?

All is not lost, but pro-life Christians face a daunting task. Singer writes, "By 2040, it may be that only a rump of hard-core, know-nothing religious fundamentalists will defend the view that every human life, from conception to death, is sacrosanct."³⁷

To thwart the fulfillment of his prediction, pro-life advocates must press for a federal ban on all human cloning. The good news is that a ban on cloning is a ban on fetus farming. The U.S. House of Representatives passed such a ban in 2002, but the legislation failed to pass in the U.S. Senate. The bad news is that should our defeat prove permanent, we will be creating human beings precisely as organ factories long before 2040. You can bet the farm on it. Just ask New Jersey.

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