Guest Essay

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Bioethics and the Future of Humanity

Senator Sam Brownback

In 1943, noted Christian apologist C. S. Lewis delivered three lectures, which were subsequently published in a book under the title *The Abolition of Man*. In these forward-looking talks, Lewis noted, "if man chooses to treat himself as raw material, raw material he will be." [1]

This line echoes a theme that I have been raising for much of the past eight years: Is the human embryo a person or a piece of property? In the American legal system, you are either one or the other. Will we treat man according to the inherent dignity that he possesses, or will we degrade human dignity by turning the human person into raw material?

In the political context, rarely have there been issues so driven by political and ideological forces, so divorced from fact and reality, as those that fall under the guise of biomedical and bioethical issues.

Central to biomedical and bioethical considerations in recent years have been the twin issues of (a) human embryonic stem cell research (ESCR), which requires the destruction of a young human organism; and (b) human cloning—also known as somatic cell nuclear transfer (SCNT)—by which a new human organism is usually created with the intent of destroying the clone to use its stem cells.

Claims are made by proponents of human-destructive research that embryonic stem cells "have the capacity to cure maladies of all sorts, including cancer, heart disease, Parkinson's, Alzheimer's, spinal cord—the long litany of maladies which

[1] C. S. Lewis, *The Abolition of Man* (New York: Touchstone, 1996), 80.

confront mankind."[2] Certainly, many prominent researchers believe such claims may be true, but to date, there has not been one peer-reviewed, published paper on even a single human clinical trial that has used human embryonic stem cells.

In fact, some researchers who support human-destructive research are trying to temper the unrealistic enthusiasm. Last year, two such proponents wrote that "it is nearly certain that the clinical benefits of the research are years or maybe decades away. This is a message that desperate families and patients will not want to hear." [3]

However, in the public arena, it is the speculative language of "cures" that is being used to play on people's emotions and fears in order to advance taxpayer funding for human-destructive research.

The debate is more ideological than scientific. It is important that we recognize this fact as we engage each other on these issues.

As an example of how the debate is driven by ideology, consider this fact: Embryonic stem cell research has been going on for twenty-five years,[4] and yet there has not been one human clinical trial—let alone "cure"—that uses these cells. On the other hand, we have more than seventy peer-reviewed, published studies of human treatments that use "adult" (non-embryonic) stem cells.[5] These seventy-plus treatments are even more remarkable when you consider that we have known for only a little over a decade that adult stem cells can be applied beyond blood-related conditions. (We have known of their blood-related applications for four decades.) Patients have benefited from adult stem cell treatments for spinal cord injury, Parkinson's disease, and heart failure, and the list continues.

Were this debate about facts, there would be little disagreement. We would put the finite resource of taxpayer money toward areas where we are getting results. Instead, the debate is ideological and political, and it appears that no amount of reasoning will change this.

A Review of Biomedical and Bioethical Legislative History and Ethical Considerations

Biomedical and bioethical issues are not a new phenomenon. They have been confronting us with increasing frequency over the course of the twentieth century. At times, we have been more aware of their importance than we normally are. While democratic legislatures have wrestled with these issues, they have often done so too late and often with little or no effect. America is no exception in this trend. A brief chronological review of some of the issues is in order. These issues include (i) aborted

[2] Sen. Arlen Specter, in *Congressional Record* (July 17, 2006): S7569.

[3] D. Magnus and M. K. Cho, "Issues in Oocyte Donation for Stem Cell Research," *Science* 308.5729 (June 17, 2005): 1747.

[4] "Twenty-five Years of Embryonic Stem Cells," *Nature*, Web Focus/Biological Sciences archive, http://www.nature.com/nature/focus/stemcells25years/index.html, accessed July 28, 2006.

[5] "Benefits of Stem Cells to Human Patients," Do No Harm fact sheet (updated July 16, 2006), http://www.stemcellresearch.org/facts/treatments.htm.

tissue for vaccines, (ii) fetal tissue research, and (iii) embryonic stem cell research and cloning technology.

Aborted Tissue for Vaccines

Consider the issue of fetal tissue research for vaccines, in which tissue from aborted babies is used for research purposes. Some of the vaccines, licensed by the U.S. Food and Drug Administration and in use today, are derived from human cell line cultures that originated in fetal tissue obtained from abortions performed in the 1960s.[6] Yet, it was not until 1975 that the U.S. Congress first addressed such research, requiring merely that researchers conduct themselves in accordance with applicable state laws governing such research.[7]

Without a doubt, our society has benefited tremendously from vaccinations, specifically in the form of dramatically reduced rates of incidence of infectious diseases. However, two questions must be raised: First, is it right to turn human beings into a means to an end, as was unquestionably done with the human babies that provided such tissue through induced abortions in the 1960s? Second, although nothing can be done to reverse the abortions in the 1960s, we now possess technology to create virtually identical vaccines that do not rely on tissue from aborted babies. Therefore, would it not be better to move in the direction of completely ethical vaccinations since such technology exists?

Fetal Tissue Research

Separate from the issue of using aborted fetal tissue for vaccines is the issue of using aborted fetal tissue for disease-specific research. This issue came to a head in Congress during debate over the NIH [National Institutes of Health] Revitalization Act of 1993.

Prior to the debate, on January 23, 1993, President Bill Clinton lifted President Ronald Reagan's moratorium on NIH-funded research that involved transplanting tissue from selectively aborted children. Under the Clinton policy, taxpayer dollars were used for research using aborted tissue.

While hyperbole has long existed in biomedical and bioethical issues, the 1993 fetal tissue debate may have marked the beginning of allusions to "cures." During the debate, one congressman claimed:

> Until President Clinton issued his executive order, the ban had stopped promising research on the treatment of Parkinson's disease, juvenile diabetes, spinal cord injuries, and Alzheimer's disease. It had also stopped research on techniques to correct genetic defects—defects for which there is now no cure or treatment—even before a baby is born.[8]

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[6] Centers for Disease Control and Prevention, National Immunization Program, "Use of Human Cell Cultures in Vaccine Manufacturing," http://www.cdc.gov/nip/vacsafe/concerns/gen/humancell.htm, last modified June 6, 2000.

[7] Department of Health and Human Services, *Protection of Human Subjects*, *Code of Federal Regulations*, title 45, sec. 46.210.

[8] Rep. Henry Waxman, in *Congressional Record* (May 25, 1993): H2731.

Through the 1993 debate, taxpayer funding of fetal tissue research was officially sanctioned. Sadly, we now know that not only were the remains of aborted children used in this research, but the patients who were in clinical trials using the aborted fetal tissue were also grievously and irreparably harmed. The young cells, outside of their natural context, grew rapidly, without control. On March 8, 2001, *The New York Times* reported:

> A carefully controlled study that tried to treat Parkinson's disease by implanting cells from aborted fetuses into patients' brains not only failed to show an overall benefit but also revealed a disastrous side effect, scientists report.… "They chew constantly, their fingers go up and down, their wrists flex and distend," Dr. Greene said. And the patients writhe and twist, jerk their heads, fling their arms about. "It was tragic, catastrophic," he said. "It's a real nightmare. And we can't selectively turn it off."[9]

From the Congressional debate, only one positive note resulted, and that was the enactment of a statute limiting the derivation of fetal tissue.[10] The statute prohibits the purchase of fetal tissue and removes incentives for a woman to undergo an abortion to provide the tissue.

Embryonic Stem Cell Research and Cloning Technology

While the hyperbole over biomedical and bioethical issues got into full swing with the 1993 fetal tissue debate, the modern phase of the debate really began with two seminal events.

The first event occurred on February 24, 1997, when it was announced that in 1996 scientists had successfully cloned the first adult mammal—a sheep named Dolly—through the process of somatic cell nuclear transfer (SCNT).[11] SCNT involves the removal of the nucleus from an egg, followed by the transfer of the nucleus of a somatic (body) cell from an adult donor into the egg; the result is the creation of an organism that is genetically identical to the adult donor.

Responding to the cloning event, the U.S. Senate moved to enact a ban on human cloning, but a motion to limit debate on the bill failed 42 to 54 (sixty votes were needed), which effectively killed consideration of the measure. Subsequently, the U.S. House of Representatives has twice passed a prohibition on human cloning by SCNT, but the Senate has failed to follow suit.

The second event occurred on November 6, 1998, when *Science* published a report by stem cell researcher James Thomson that he had isolated cells from the inner cell mass of the early embryo and developed the first human embryonic stem cell lines.[12]

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[9] Gina Kolata, "Parkinson's Research Is Set Back by Failure of Fetal Cell Implants," *New York Times*, March 8, 2001.

[10] "Prohibitions regarding Human Fetal Tissue," *U.S. Code*, title 42, sec.289g-2.

[11] J. A. Johnson and E. Williams, *Human Cloning*, CRS Report for Congress no. 31358, updated July 20, 2006.

[12] James A. Thomson, "Embryonic Stem Cell Lines Derived from Human Blastocysts," *Science* 282.5391 (November 6, 1998), 1145–1147.

From 1998 until 2001, no federal taxpayer funds were spent on destructive human ESCR, but substantial public pressure was being raised by the prospect of "cures." In this climate, some recognized pro-life advocates began discussing whether there might be an ethical way around the dilemma.[13] *The Washington Post* reported that Princeton professor Robert George "said the discussion of compromise was based on the abstract 'question of ethical principles controlling decisions whether to accept benefits resulting, not from one's own wrongdoing, but from the (past or continuing) wrongdoing of others.'"[14] The report continued:

> As a hypothetical example, George wrote: "Imagine that U.S. soldiers are fighting their way into Nazi death camps and taking heavy casualties in their efforts to save surviving prisoners. Upon liberating the camp, they find—to their horror—organs taken from people the Nazis had murdered.… As it happens, one or more of the gravely wounded U.S. soldiers could be saved by using some of these organs for transplants." While still problematic, George said, use of the organs could be justified. [15]

Following these discussions, President George W. Bush announced a federal human embryonic stem cell research policy on August 9, 2001. This policy allowed for federal funds to be used on research that could not be conducted without the destruction of young human lives. Under this policy, however, federal funds could be used only on human embryos killed and stem cell lines created before the announcement of the policy that evening.

In the wake of the August 9, 2001, policy, tensions have increased over the stem cell issue. On one level, proponents of human destructive research have convinced many legislators that SCNT human cloning is essential for the further development of ESCR. Further, Orwellian newspeak tactics have been used to change the terms of the debate so that many will now claim that SCNT is *not* actually human cloning. On another level, both proponents and opponents of the technology have moved their battles to the individual states. Some states, such as California, have authorized billions of state taxpayer dollars to fund ESCR and human cloning. Conversely, at least seven other states have enacted laws prohibiting all human cloning.

Not until December 2005—beyond annual appropriations riders—was the federal legislative stalemate on biomedical or bioethical issues broken. In December 2005, federal legislation passed both Houses of Congress that established an ethical national cord-blood stem cell bank.[16] Following this, two bills were passed by the Congress and sent to the President in July 2006. One bill, which the President ve-

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[13] See, for example, Aaron Zitner, "Stem Cell Compromise Cited by Bush Catholic Advisors," *The Los Angeles Times*, July 8, 2001.

[14] Thomas Edsall, "Catholics Differ on Stem Cell Issue," *Washington Post*, July 30, 2001.

[15] Ibid.

[16] *Stem Cell Therapeutic and Research Act of 2005*, Public Law 109-129 (December 20, 2005).

toed, would have increased federal funding for destructive human ESCR. The other bill established a prohibition on fetus farming.[17]

The fetus farming ban may, in effect, be the most meaningful and forward-looking biomedical and bioethical law that has ever been passed by the U.S. Congress. The law prohibits persons or organizations from accepting tissue from an aborted pregnancy (in either a human or a nonhuman womb) when the pregnancy was initiated to provide the tissue.

This law has direct implications on destructive human ESCR and human cloning. Because the young embryonic-type cells have a tendency to form tumors and grow out of control, similar to the fetal tissue in the Parkinson's trials, there is a strong likelihood that if treatments are ever available through the unethical technology, they would need to gestate embryos ("fetus farm") to get more mature cells, tissue, and organs for transplantation without the tumor formation or rejection issues. The fetus farming law already limits a permissive human destructive research state law in New Jersey, and it may go far toward discouraging researchers from pursuing this technology in humans.

The Responsibility of a Legislator

Although the complexity of biomedical and bioethical issues will increase in the coming years, the heart of the issue—the inherent dignity of the human person—will remain constant.

From biology textbooks, we learn that:

> Although life is a continuous process, fertilization is a critical landmark because, under ordinary circumstances, a new, genetically distinct human organism is thereby formed.… The combination of twenty-three chromosomes present in each pronucleus results in forty-six chromosomes in the zygote. Thus the diploid number is restored and the embryonic genome is formed. The embryo now exists as a genetic unity.[18]

Such definitions—from scientific experts—are helpful in clarifying that human life does begin at the embryonic phase, whether the embryo comes the "old fashioned way," via IVF, or as the product of various scientific methods, such as SCNT human cloning.

With the scientific fact in hand, we evaluate the facts in light of our ethical framework. For instance, we know that the human embryo is a human life, so how should we treat it?

Human life has immeasurable value—from the youngest to the oldest. Human beings are ends in themselves: it is wrong to use any human being as a means to an end. Our value is intrinsic. Yes, we want to help people and treat people who have medical conditions, but we must not trample on any human being to achieve such a good end.

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[17] *Fetus Farming Prohibition Act of 2006*, Public Law 109-242 (July 19, 2006).

[18] Ronan R. O'Rahilly and Fabiola Muller, *Human Embryology and Teratology*, 2nd ed. (New York: Wiley-Liss, 1996), 8, 29.

This is because human beings are distinct and unique among all creation. Some philosophers would make four distinctions among creation: (1) things that *exist*, such as rocks, air, and water; (2) "things that exist, *grow and live*," such as plants and trees; (3) "things that exist, grow, live, and *feel*," such as animals; and (4) "things that exist, grow, live, feel, and *understand*" *or have the power of reasoning*.[19]

Only human beings may be said to fully belong to this fourth class of creation. The great philosopher St. Thomas Aquinas, elaborating on this point, noted that "no creature inferior to man, such as animals which are without reason, can [know by reasoning.]"[20]

It is the human soul—inexorably linked with the human body—that is able to reason and has immeasurable value. Of course, we cannot scientifically identify or describe the human soul—but the best philosophical tradition and understanding has always held that it is the human soul that so decisively sets human beings apart from animals and the rest of earthly creation.

While we cannot scientifically define when the moment of "ensoulment" occurs, we can—as noted in the textbook—scientifically define with certainty when human life has begun. At this point, we must give the benefit of the doubt. As President Reagan noted in his 1983 essay "Abortion and the Conscience of a Nation":

> Anyone who doesn't feel sure whether we are talking about a second human life should clearly give life the benefit of the doubt. If you don't know whether a body is alive or dead, you would never bury it. I think this consideration itself should be enough for all of us to insist on protecting the unborn.[21]

It is within this context that all legislators:

> have a duty to make courageous choices in support of life, especially through legislative measures.… No one can ever renounce this responsibility, especially when he or she has a legislative or decision-making mandate, which calls that person to answer to God, to his or her own conscience and to the whole of society for choices which may be contrary to the common good.[22]

And specifically:

> The Church encourages political leaders, starting with those who are Christians, not to give in, but to make those choices which, taking into account what is realistically attainable, will lead to the re-establishment of a just order in the defense and promotion of the value of life.[23]

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[19] *Baltimore Catechis*m, no. 3 (New York: Benziger Brothers, 1885 and 1974), q. 215 (emphasis added).

[20] R. P. Thomas Pegues, O.P., *Catechism of the 'Summa Theologica' of Saint Thomas Aquinas* (New York: Benziger Brothers, 1922), 27.

[21] Ronald Reagan, "Abortion and the Conscience of the Nation," *Human Life Review* (Spring 1983).

[22] John Paul II, *Evangelium vitae* (March 25, 1995), n. 90.

[23] Ibid.

The Future of the Biomedical and Bioethical Debate

Biomedical and bioethical methods and techniques will only get more complicated as time passes. Furthermore, they will arise with greater rapidity. Accordingly, it is especially important that we have a clear moral framework from which to evaluate the issues.

On the horizon, we will be dealing with issues ranging from human-animal hybrids to human germ-line modification and germ-cell reprogramming. Connected with many of these new issues, as well as the old issues like SCNT human cloning, is the potential that vulnerable women—from junior researchers who want to advance in their field to women who are poor—will be exploited for their eggs, which are often essential to biomedical research. Also, it is important to note that we will be dealing more frequently with end-of-life issues, such as so-called "euthanasia," as we have already seen in some central European nations. Whether one is addressing nascent human life, the woman in danger of exploitation, or the sick and elderly, central to all of these issues is the indissoluble integrity of the human person.

As we proceed and formulate our strategy for the pursuit of a culture of life, it is critical that we recognize that the key forces in this debate are political and ideological in nature.

In this climate, it would be especially helpful to have clarifying statements from thoughtful theologians on issues that are splitting the pro-life movement, such as the altered nuclear transfer-oocyte assisted reprogramming (ANT-OAR) proposal. Respected pro-life proponents of ANT-OAR—such as Hadley Arkes, Professor of Jurisprudence at Amherst College, and the Rev. Nicanor Austriaco, assistant professor of biology at Providence College—have the intention of providing an ethical alternative to ESCR. Other eminent pro-life theologians, of diverse philosophical backgrounds—such as David Schindler, dean of the Pontifical John Paul II Institute for Marriage and Family, and Stephen Long, associate professor of moral theology at Ave Maria University—raise serious questions about the morality of the procedure and even the animal-testing hypotheses' proposed by ANT-OAR proponents.

Reason's Guidance

As we move forward, I am hopeful that reason, and not emotional appeals, will guide the debate and the opinion of the American people. Real treatments are best found through ethical research, which respects the dignity and integrity of the human person.

Every human life is beautiful, and worthy of protection. I am confident that the American people will embrace the culture of life. On behalf of the culture of life, let us pray and persevere. May God bless America.