

# *Human Cloning: Is It Morally Right?*

*By Peter Bocchino*

## **Introduction**

The issue of human cloning is a hotly debated topic in academic, scientific, medical, legal, and political circles. It's sad to think that with the way technology is growing and advancing, we are probably not too far away from seeing someone actually attempting to clone another human being, regardless of opinions and laws. In fact, one month after Scottish scientists produced Dolly, a sheep cloned from an adult cell, the world's first human cloning firm, Valiant Venture Ltd. (VVL), was launched. Brigitte Boisselier, a French chemist, signed on as VVL's scientific director. Boisselier does not see any boundaries on this issue. Boisselier said, "We've subcontracted the work to labs where it's legal to do this . . . To say that human cloning is forbidden won't stop the science . . . It's important that society knows that this is possible, that it can be—and will be—done."<sup>1</sup> Far fetched? No, VVL is only 14 months old and has a waiting list of 100 people. The cost to have a "clone of one's own" is in the neighborhood of \$200,000. VVL offers a service called *Cloniad* to help parents who want a child cloned from one of them.

Closer to home, Chicago physicist turned biologist, Richard Seed, plans to open a clinic as soon as the funds are available. Cloning ideas range from growing human organs in farm animals, to cloning people such as past Hollywood stars and replacing a dead child. Just log on and check it out. You'll see the "world of possibilities." It has even been suggested that DNA be taken from the Holy Shroud in which, according to tradition, Christ was wrapped for burial in order to clone Jesus. When one imagines such a world, one can also imagine another kind of world filled with Stalin, Hitler and Mussolini clones.

As I have researched and pondered how to approach this issue, I have decided that the thesis of this paper should focus on some of the critical questions surrounding human cloning. Of course, the most essential question that will be addressed is the ethical question. Yet in order to appreciate the depth and scope of the issues surrounding human cloning, I will address the following questions:

What is human cloning? (The scientific question)

What is the history leading up to cloning? (The historical question)

What are the valid arguments for human cloning? (The humanitarian question)

What are the valid arguments against human cloning? (The ethical question)

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<sup>1</sup> Virginia Morell, "A Clone of One's Own," *Discover*, May 1998, p. 84.

### ***WHAT IS HUMAN CLONING? (The scientific question)***

The process of cloning involves an organism, or group of organisms, derived from another organism by an asexual (nonsexual) reproductive process. The word has been applied to cells as well as to organisms, so that a group of cells stemming from a single cell is also called a clone. Usually the members of a clone are identical in their inherited characteristics—that is, in their genes—except for any differences caused by mutation. Identical twins, for example, who originate by the division of a single fertilized egg, are members of a clone; whereas nonidentical twins, who derive from two separate fertilized eggs, are not. Besides the organisms known as procaryotes (the bacteria and blue-green algae), a number of other simple organisms such as most protozoans, many other algae, and some yeasts, also reproduce by cloning, as do certain higher organisms, for example, flatworms and plants such as the dandelion.

Through recent advances of genetic engineering, scientists can isolate an individual gene (or group of genes) from one organism and grow it in another organism belonging to a different species. The species chosen as a recipient is usually one that can reproduce asexually, such as a bacterium or yeast. Thus it is able to produce a clone of organisms, or of cells, that all contain the same foreign gene, or genes. Because bacteria, yeasts, and other cultured cells can multiply rapidly, these methods make possible the production of many copies of a particular gene. This technique is called cloning, because it uses clones of organisms or cells. Identical-twin animals may be produced by cloning as well, as in the case of Dolly. An embryo in the early stage of development is removed from the uterus and split, then each separate part is placed in a surrogate uterus.

Another development has been the discovery that a whole nucleus, containing an entire set of chromosomes, can be taken from a cell and injected into a fertilized egg whose own nucleus has been removed. The division of the egg brings about the division of the nucleus, and the descendant nuclei can, in their turn, be injected into eggs. After several such transfers, the nuclei may become capable of directing the development of the eggs into complete new organisms genetically identical to the organism from which the original nucleus was taken. This cloning technique is thus, in theory, capable of producing large numbers of genetically identical individuals.

With respect to humans, an unfertilized egg would be taken from a woman and its nucleus removed. Genes taken from another person are then placed inside the egg. Chemicals are added and a spark of electricity jolts the cell into dividing and growing into a clone. Since the DNA of every cell in the body (except spermatozoa and ova), contains a complete set of genetic blueprints, a clone would have the same genetic code as his/her identical “parent” and yet be fully human. This is comparable to a sibling having the same genetic code as identical twin and yet is fully human. Almost all, if not all scientists agree that cloning a human will take place, it is just a matter of time.

### ***WHAT IS THE HISTORY LEADING UP TO CLONING? (The historical question)***<sup>2</sup>

As I was doing my research on human cloning, I was finding a parallel topic that is probably more likely to become a reality (and is one in certain countries like China) and more dangerous. That issue is the science of eugenics. The word eugenics (from the Greek eugenes or wellborn) was coined in 1883 by Francis Galton, an Englishman and cousin of Charles Darwin, who applied Darwinian science to develop theories about heredity and good or noble birth. *The Encyclopedia of Bioethics* “Eugenics” entry notes that the term has had different meanings in different eras: “a science that investigates methods to ameliorate the genetic composition of the human race, a program to foster such betterment;

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<sup>2</sup> Various Internet resources were used to develop this section. The primary resource was “The Human Genome Project,” @ <http://guweb.georgetown.edu/nrcbl/scopesnotes>.

a social movement; and in its perverted form, a pseudo-scientific retreat for bigots and racists.” Eugenics fits into this research in that if inferior offspring can be eliminated and “better” offspring can be preserved, it is the genetically superior individuals who would be desirable to have cloned. Hence, I have incorporated a brief history and the current status of eugenics into my research.

Phrases such as “survival of the fittest” and “struggle for existence” came into use at the end of the 19th century when eugenics societies were created throughout the world to popularize genetic science. ‘Negative eugenics’ utilized marriage restriction, sterilization, or custodial commitment of those thought to have unwanted characteristics. Positive eugenics’ tried to encourage the population perceived as the “best and brightest” to have more offspring.

In the United States, after World War I, new ideas like the importance of environmental influences and the more complex concept of multi-gene effects in inheritance had slowed scientific justification for eugenics, but this knowledge did not slow pressure for legislation, judicial action, or immigration controls. The U.S. Immigration Restriction Act of 1924 favored immigration from northern Europe and greatly restricted the entry of persons from other areas referred to as “biologically inferior.” Between 1907 and 1937 thirty-two states required sterilization of various citizens viewed as undesirable: the mentally ill or handicapped, those convicted of sexual, drug, or alcohol crimes and others viewed as “degenerate.”

In Germany interest in eugenics flourished after the turn of the century when Dr. Alfred Ploetz founded the Archives of Race-Theory and Social Biology in 1904 and the German Society of Racial Hygiene in 1905. The German term *Rassenhygiene* or “race hygiene” was broader than the word eugenics; it included all attempts at improving hereditary qualities as well as measures directed at population increase. By the 1920s various German textbooks incorporated ideas of heredity and racial hygiene, and German professors were participating in the international eugenics movement. The Kaiser Wilhelm Institute of Anthropology, Human Heredity, and Eugenics was founded in 1927; by 1933 a sterilization law which had been entitled “Eugenics in the service of public welfare” indicated compulsory sterilization “for the prevention of progeny with hereditary defects” in cases of congenital mental defects, schizophrenia, manic-depressive psychosis, hereditary epilepsy and severe alcoholism.

The darkest period for eugenics was when Nazi Germans embarked on their “final solution” to the Jewish question, or the Holocaust. The Nazi racial hygiene program began with involuntary sterilizations and ended with genocide. “Survival of the fittest,” was incorporated into the mindset of Nazi Germany with the rise of the Adolf Hitler and the “struggle” to save Germany. In 1859, Charles Darwin published his work on evolution, *The Origin of Species*. The subtitle of Darwin’s work—*The Preservation of Favoured Races in the Struggle for Life* became the theme of Hitler’s book—*Mein Kampf* (My Struggle). In 1924, a mere 65 years after the publication of *The Origin of Species*, Adolf Hitler wrote,

The stronger must dominate and not mate with the weaker, which would signify the sacrifice of its own higher nature. Only the born weakling can look upon this principle as cruel, and if he does so it is merely because he is of a feebler nature and narrower mind; for if such a law did not direct the process of evolution then the higher development of organic life would not be conceivable at all . . . If Nature does not wish that weaker individuals should mate with the stronger, she wishes even less that a superior race should intermingle with an inferior one; because in such a case all her efforts, throughout hundreds of thousands of years, to establish an evolutionary higher stage of being, may thus be rendered futile.<sup>3</sup>

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<sup>3</sup> Adolf Hitler, *Mein Kampf*, (London: Hurst and Blackett Ltd., 1939) pp. 239-240.

Nazi Germany, influenced by Social Darwinism, enacted laws that were based on the assumptions that they needed to eliminate the “unfit”, and that eugenics would improve the general level of industrial and personal efficiency in the working class and eventually give rise to a superior Aryan race. Hence, beginning with the 1933 Law for the Prevention of Congenitally Ill Progeny, 350,000 schizophrenics and mentally ill were involuntarily sterilized, and marriage or sexual contact between Jews and other Germans was banned. A few hundred black children and 30,000 German Gypsies were sterilized. By 1945, when the allies liberated those remaining in Nazi concentration camps, six million Jews, 750,000 Gypsies, and 70,000 German psychiatric patients had been killed by the Nazis. After the German experience, eugenic thought was at its lowest point, and to the present, the term “eugenics” invokes a sense of horror in some people.

Great Britain, the United States and Germany were the countries most involved with eugenic science in the first half of this century, but interest was always present in Europe and other parts of the world. Argentina, Austria, Brazil, Canada, China, Finland, France, Italy, Japan, Mexico, Norway and Sweden had eugenics movements of their own. With the rise of new genetic technologies, and the technical ability to change an individual's genetic heritage, eugenics is once again a topic both discussed and written about throughout the world. Since World War II, interest in the type of eugenics popular in the early half of the century has changed. Utilizing gene therapy, genetic testing and screening, and genetic counseling, scientists and clinicians use knowledge of inherited disease or other genetic problems to change (for the better) those persons who can be assisted. Still, questions are raised about the morality of changing human genes, the wisdom of acting when no cure is available, or the legality of breaching a patient's genetic confidentiality.

Concepts central to the old eugenics have not completely disappeared: recent Chinese law, the Law on Maternal and Infant Health Care, which took effect June 1, 1995, requires premarital checkups to determine whether either partner carries “genetic diseases of a serious nature,” infectious diseases (AIDS, gonorrhea, syphilis and leprosy), or a “relevant mental disease.” The law stipulates that marriages will be permitted only after the couple has been sterilized. In speaking of the then draft legislation in 1993, a health minister cited statistics showing that China “now has more than ten million disabled persons who could have been prevented through better controls.”

China’s birth policy is reminiscent of the programs of sterilizations carried out in Germany in the 1930s. China’s National Marriage Law of 1950 (prohibiting marriage in China if one of the parties suffered from mental illness, leprosy or venereal disease) and subsequent laws stressed eugenics and healthier births. China’s goal is fewer but healthier babies and they view eugenics as a “matter of quality control, devoid of moral implications.”

We dare not point out China as the only nation that has entered and continues to plunge deeper into darkness. The Eugenics Education Society in Britain was founded over fears the “residuum,” or “pauper class” was reproducing so quickly that it would be able to stem the tide of natural evolution of the human race. The Society attempted to integrate new scientific and mathematical theories into discussions of public policy and legislation. The Eugenics Society campaign to pass legislation on voluntary sterilization of the mental “defectives” was the most significant effort, though the Society's crusade fell short. The history of British social hygiene organizations such as the Eugenics Society, the National Council for Mental Hygiene, the Central Association for Mental Welfare, the People's League of Health, and the National Institute for Industrial Psychology, were influenced by Social Darwinism. They too were founded on the assumptions that we need to eliminate the “unfit,” and that eugenics would improve the general level of industrial and personal efficiency in the working class.

Sterilization of the “feeble-minded” in British Columbia and Alberta was the most significant effort to stem reproduction of “degenerate” persons, immigration restriction, birth control, mental testing, and family allowances were all suggested as ways to improve Canadian society in the first half of the twentieth century. A lawsuit against the government of Alberta for wrongful sterilization was won by a woman who had been sterilized at age 14 under the Sexual Sterilization Act of 1927. That Act promoted the theory of eugenics and led to the sterilization of more than 2800 persons. A physician who served on the original sterilization board is reported to have said that eugenics is in some ways practiced now through prenatal diagnosis and therapeutic abortion. The Canadian Law Reform Commission was established in 1979 to examine reasons for sterilizing the disabled and deals with its legality and consent issues. The Commission makes policy recommendations for Canada, and includes the text of fourteen policy statements or legislation on sterilization of the disabled.

In the *American Journal of Law and Medicine*, an article was written presenting a model for government protection to allow parents to select certain traits in their offspring while proposing limits in the event the trait were damaging to the future child. The author discussed the “eugenic overtones” that this might entail and said that “evil use does not make eugenics evil in nature.”<sup>4</sup>

Eugenics has been described as “the study of agencies under social control that may improve or impair the racial qualities of future generations, whether physically or mentally.” This definition was plastered for years on the cover of the Eugenics Society's publication *Eugenics Review*, and was expanded upon in 1970 by I.I. Gottesman, an American Eugenics Society director. Gottesman said, “The essence of evolution is natural selection; the essence of eugenics is the replacement of ‘natural’ selection by conscious, premeditated, or artificial selection in the hope of speeding up the evolution of desirable characteristics and the elimination of undesirable ones.” That ought to sound familiar and dangerously identical to,

If Nature does not wish that weaker individuals should mate with the stronger, she wishes even less that a superior race should intermingle with an inferior one; because in such a case all her efforts, throughout hundreds of thousands of years, to establish an evolutionary higher stage of being, may thus be rendered futile.<sup>5</sup>

The truth is that eugenical thinking has been spreading steadily in Western culture throughout this century. Even after the German embarrassment, the eugenicists kept right on pursuing the same goals they had always pursued, the same goals that Hitler pursued. But the spread of eugenicism after World War II in the United States is not well studied or documented.

Eugenics is dedicated to the proposition that all men are created unequal and the food is running short; that, in the struggle for food, those who have an inherited advantage prevail and pass the advantage on to their children who prevail even more. A further belief is that, at this point in evolution, the more evolved must take destiny and the less evolved in hand. Selection must not be left to chance for chance is cruel, capricious and, all too often, expensive but must instead be led by the kindly elite - Harvard professors, British aristocrats, Serbian psychiatrists, Aryans and so on. But “death control,” which has been the main method used by natural selection or chance, for termination of useless populations, must be replaced by “birth control” which is cheaper, and, as Charles Darwin pointed out in *The Descent of Man*, more effective.

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<sup>4</sup> Owen D Jones, “Reproductive Autonomy and Evolutionary Biology: A Regulatory Framework for Trait-Selection Technologies,” *American Journal of Law & Medicine*, 1993, 19 (3) pp. 187-231.

<sup>5</sup> Adolf Hitler, *Mein Kampf*, (London: Hurst and Blackett Ltd., 1939) pp. 239-240.



I include the following summary showing the connection between abortion and eugenics and how both are critically related to the undermining of democracy.

The ideas of eugenics are based on the assumption that men are unequal, while democracy is based on the assumption that they are equal. It is therefore, politically very difficult to carry out eugenic ideas in a democratic community when those ideas take the form, not of suggesting that there is a minority of inferior people, such as imbeciles, but of admitting that there is a minority of superior people. The former is pleasing to the majority, the latter unpleasing. Measures embodying the former fact can therefore win the support of the majority, while measures embodying the latter cannot." (from *The Sanctity of Life and the Criminal Law*). These are the words of Bertrand Russell, who is being quoted by Professor Glanville Williams. Williams is the Rous Ball Professor of English law at Cambridge University, a fellow of the English Eugenics Society, and, for the last twenty three years, head of the English Abortion Law Reform Association. What Williams is saying is that the elitist ideas of eugenics can come to power in democracies by encouraging attacks on minorities, much as Hitler came to power by scapegoating the Jews.

The quotation expresses an attitude typical to the book, *The Sanctity of Life and the Criminal Law*, in which it is found. It is therefore distressing to find that this book is cited twice in the Roe v. Wade decision and used as the unacknowledged basis for most Justice Blackmun's account of the history of abortion and of the personhood of the unborn child in that decision. For if eugenic ideas lie behind the Roe v. Wade discussion of personhood, then antidemocratic and unconstitutional ideas lie behind it. Furthermore, Bertrand Russell, speaking of eugenics in the Thirties, said: "Democracy stands in the way." This underlines the point that attempts to advance eugenics include, as a component detail, attempts to undermine democracy.

What are we to make of the fact that Planned Parenthood which runs 49 abortion clinics, was founded by eugenicists - Margaret Sanger, Abraham Stone, Mrs. Louis de B. Moore, Dorothy Brush and many others? What does it mean that the Association for the Study of Abortion was founded by Alan Guttmacher of Planned Parenthood, a former vice-president of the American Eugenic Society? Or that the Population Council was founded by Frederick Osborn a former president of both the Pioneer Fund and the American Eugenic Society? Or that the Catholics cited in Roe v. Wade, John Noonan and Daniel Callahan, were members of the Population Council, a eugenic front group? Above all, what does it mean that 25% of all abortions in America are performed on black women when blacks are twelve percent of the population? Why are fertile black women decreasing to post Civil War-Ku Klux Klan era levels? Why are the pictures of those who "need" abortion so frequently pictures of blacks? Shakespeare pictured the hypocrite as "the smiler with the knife." It seems to me that all the talk about "abortion rights" is just a piece of hypocrisy by means of which eugenics is simultaneously marketed as a right (the smiler) and as racism (with the knife).<sup>6</sup>

World War II saw the advent of Hitler and his attempts at controlling the gene pool through eugenics. Now we have the technological "know-how" to make our genes dance on a string for our own vanity and pride. Where do we draw the line and who will draw it? Have we not learned anything from history? Yet, before we venture further into the "red zone," we must consider some of the valid arguments in favor of human cloning.

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<sup>6</sup> This data and comments found at a Website known as *The Eugenics Watch*.

## WHAT ARE THE VALID ARGUMENTS FOR HUMAN CLONING?

### (The humanitarian question)<sup>7</sup>

For years now scientists have used cloning techniques to help produce better crops and gardens and genetic engineers have worked with livestock. The medical breakthroughs that led up to Dolly began around mid-century as noted in the timeline on the right. Using cloning-type methodology and gene alterations, scientists are attempting to create new organs such as livers, kidneys and even the possibility of human hearts. This kind of research is not cloning, but to the public it is considered to be the same.

Think about it, organ research called, transgenetic xenotransplantation has been going on for around fifteen years.

Researchers have taken human DNA and put it into the genes of pigs in an attempt to see if someday their organs could be used in humans. In the past, transplanting organs directly from animals into humans have failed because the human immune system rejects the foreign organ. However, by growing genetically altered organs, scientists are hoping to fool the immune system and provide enough organs for the 53,000 Americans on waiting lists. No transgenetic organs have been transplanted into humans, though studies have started using research monkeys. All studies of this nature is currently regulated by the U.S. Food and drug Administration. Who would object to a dying child who can be saved by receiving an organ that was grown in a monkey?

Human cloning and its related research might produce a greater understanding of the causes of miscarriages; this might lead to a treatment to prevent spontaneous abortions. This would be of immense help for women who cannot bring a fetus to term. It might lead to an understanding of the mechanisms by which a *morula* (a mass of cells that has developed from a blastula) attaches itself to the wall of the uterus. This may generate new, effective contraceptives that exhibit very few side effects. The rapid growth of the human morula is similar to the rate at which cancer cells propagate. Cancer researchers believe that if a method is found to stop the division of a human ovum then a technique for terminating the growth of a cancer might be found.

Treatments for damage to the brain or nervous system might be possible due to cloning. Damaged nerve tissue in adults does not regenerate on its own. However, stem cells might be capable of repairing the tissue. Because of the large number of stem cells required, human embryo cloning would be required.

Gene therapy is likely to have the greatest success with diseases that are caused by single gene defects. By the end of 1993, gene therapy had been approved for use on such diseases as severe combined immune deficiency, familial hypercholesterolemia, cystic fibrosis, and Gaucher's disease. Most protocols to date are aimed toward the treatment of cancer; a few are also targeted toward AIDS.

## TIMELINE

- 1952: First calf produced using frozen semen
- 1953: Frozen sperm used for human artificial insemination
- 1967: Human-to-human heart transplant
- 1970: Mice embryos cloned
- 1973: First calf produced from frozen embryos
- 1978: First "test-tube baby" born in Britain
- 1979: First sheep embryos cloned
- 1983: Baby born made by father's sperm & donor egg
- 1984: Girl born from frozen embryo
- 1984: Baboon heart transplanted into infant
- 1990: Human Genome Project starts mapping location of all genes
- 1993: Human embryos cloned
- 1997: Adult sheep cloned

<sup>7</sup> The views represented in this section do not necessarily refer "Christian" views of what it means to be "humanitarian." Some would seem valid to us, however, many of them reflect what our society sees as that which is "humane" and would only help to make society "better." We must understand these views if we are to refute them.

Numerous disorders are discussed as candidates for gene therapy: Parkinson's and Alzheimer's diseases, arthritis, and heart disease.

Parents who are known to be at risk of passing a genetic defect to a child could make use of cloning. A fertilized ovum could be cloned, and the duplicate tested for the disease or disorder. If the clone was free of genetic defects, then the other clone would be as well. The latter could be implanted in the woman and allowed to mature to term. Parents who may have a child dying from injuries received in an accident could have that child cloned.

In conventional in vitro fertilization, doctors attempt to start with many ovums, fertilize each with sperm and implant all of them in the woman's womb in the hope that one will result in pregnancy. But some women can only supply a single egg. Through the use of embryo cloning, that egg might be divisible into, say, 8 zygotes for implanting. The chance of those women becoming pregnant more quickly would be much greater. Cloning could produce a reservoir of "spare parts." Fertilized ovums could be cloned into multiple zygotes; one could be implanted in the woman and allowed to develop into a normal baby; the other zygotes could be frozen for future use. In the event that the child required a bone marrow transplant, one of the zygotes could be taken out of storage, implanted, allowed to mature to a baby and then contribute some of its spare bone marrow to its (earlier) identical twin.

A woman could prefer to have one set of identical twins, rather than go through two separate pregnancies. She might prefer this in order to minimize disruption to her career. It might make the normal vaginal delivery of smaller twins possible, whereas delivery of a larger fetus might be impossible for structural reasons. She might simply prefer to only have to endure the discomfort of a single pregnancy. She might wish to have children that could contribute a kidney to their sibling, if needed. Through embryo cloning, she could assure that she would deliver identical twins.

Some talents seem to be genetically influenced. Musical ability seems to run in families. Cloning using the DNA from the cell of an adult with the desired traits or talents might produce an infant with similar potential. A heterosexual couple in which the husband was completely sterile could use adult DNA cloning to produce a child. An ovum from the woman would be coupled with a cell from the man's body. Both would contribute to the child: the woman would provide the "factory" for creating cells; the man would provide the "genetic information."

Two lesbians could elect to have a child by adult DNA cloning rather than by artificial insemination by a man's sperm. Each would then contribute part of her body to the fertilized ovum: one woman would give the ovum; the other woman the DNA. Both would have parts of their bodies involved in the conception.

The Human Genome Project, an ongoing effort to identify the location of all the genes in the human genome, continues to identify genetic diseases. Where and when the line is crossed is the question. The place where the line is drawn is related to the question on where medical purposes end and where and where "improvement" begins. Drawing that line leads us into our final question concerning ethics.

### ***WHAT ARE THE VALID ARGUMENTS AGAINST HUMAN CLONING? (The ethical question)***

Even skeptical scientists believe that no matter what, the technique concerning human cloning will continue somewhere in the world. They claim that it will only be a matter of time before it happens. Yet, few people realize that the success of Dolly followed 277 failed attempts. What happens to the unsuccessful attempts at human cloning? As evangelical Christians, we believe that God created



humanity and that human life begins at conception. On that basis, we believe in the intrinsic value of human life and that they are God given rights which are protected by our constitution. Yet, this view does not hold sway with government officials, legislators or the majority of Americans. One thing is for certain right now, if human cloning research is allowed to continue in an unmitigated manner, the life created by scientists will not be viewed as having intrinsic value—in fact, this already occurring in human embryo research. In 1994, two researcher, Jerry Hall and Robert Stillman, discarded numerous human embryos before successfully cloning one.

Moreover, think about the implications of researchers in two obscure labs (the University of Texas and the University of Bath, England) who have created headless mice and tadpoles. Take the mice for example,

Researchers found the gene that tells the embryo to produce the head. They deleted it. They did this in a thousand mice embryos, four of which were born . . . Why should you be panicked? Because humans are next. “It would almost certainly be possible to produce human bodies without a forebrain,” Princeton biologist Lee Silver told the London *Sunday Times*. “These human bodies without any semblance of consciousness would not be considered persons, and thus it would be perfectly legal to keep them ‘alive’ as a future source of organs.”<sup>8</sup>

One can easily imagine going to a company who specialized in “organ farming” and having them take a cell from your arm in order to be cloned. They would then grow a unconscious body that becomes your own personal tissue-organ matched spare parts repository. As Aldous Huxley foretold in *Brave New World*, artificial wombs could be created to incubate tiny infants. This would help keep production costs and liability down, not to mention the fact that it might not be easy to find sober minded women who would carry headless babies to their birth.

This leads to another ethical concern, if human embryos are not considered to be “persons,” then what are they? What if a living organism is not considered to be human, what can happen? This is no longer a speculative question, it has been addressed and continues to get dangerously close to viewing human life as a thing and not a person with intrinsic value. Consider the following excerpts from a *Washington Post* newspaper article:

A New York scientist has quietly applied for a patent on a method for making creatures that are part human and part animal in a calculated move designed to reignite debate about the morality of patenting life forms and engineering human beings. The scientist, Stuart A. Newman, a cellular biologist at New York Medical College in Valhalla, said he has not created such creatures and never intends to. Indeed, he said, although the hybrids could be extremely useful in medical research, his goal is to stop the technology from being used by anyone—and to force the U.S. Patent and Trademark Office and the courts to reexamine this country's 18-year history of allowing patents on living creatures, which he considers unethical and immoral.

Patents are not allowed on human beings, but patent law experts said there is nothing in U.S. patent code that would preclude someone from winning a patent on a partially human creature. Already, the patent office has awarded several patents on animals with minor human components—including laboratory mice engineered with human cancer genes or human immune system cells. Even if the patent is not awarded to Newman, several experts agreed, the ploy could achieve its primary goal of forcing a national debate about the commercialization of life in an era when genes, cells, tissues and

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<sup>8</sup> *Citizen*, “Of Headless Mice . . . And Men,” (Focus on the Family, March 1998) Vol. 12, No. 3, p. 9. Article by Charles Krauthammer, reprinted with permission from *Time*, January 19, 1998.

organs are being shuttled increasingly across species barriers and blurring the distinctions between humans and non-human animals.

“It is a classic slippery slope,” said Thomas Murray, director of the Center for Biomedical Ethics at Case Western Reserve University. “If we put one human gene in an animal, or two or three, some people may get nervous but you’re clearly not making a person yet. But when you talk about a hefty percentage of the cells being human . . . this really is problematic. Then you have to ask these very hard questions about what it means to be human” . . . The patent office’s policy of not granting patents on human beings is based on the 13th Amendment to the Constitution, which blocks slavery. But the office has never been faced with the question of “how human” an animal would have to be before it was deemed worthy of that protection . . . For years, the patent office assumed that living things could not be patented and agreed to grant patents on some plants and seeds only after Congress passed specific laws commanding it to do so. The office rejected the first request for a patent on a bacterium—one engineered to digest oil spills—in 1978. But in a 5-to-4 decision in 1980, the U.S. Supreme Court overruled that decision, saying living things could be patented as long as they met the standard criteria for patentability. Seven years later, the office granted its first patent on an animal—a genetically engineered mouse—and it has since granted 79 other animal patents—including several on mice, rats and rabbits and one each for an engineered bird, fish, pig, guinea pig, sheep and abalone. More than 1,800 patents have also been granted for genes and lines of cultured cells, including human ones, that scientists believe have medical potential.

“With cloning, with Dolly, with everything we’ve been hearing in the past couple of years, science is progressing and so these issues have come to the fore,” said O’Connor, now executive director of the American Institute for Medical and Biological Engineering in Washington. “What does it take to be human? A cell line? A limb? A whole human? A chimera [beast of Greek mythology]? We don’t have a definition of what a human being is for patent purposes.”<sup>9</sup>

Seems like we are back to the same argument as with abortion, but with a different application. In principle, there is no difference. As Christians, we must continue to argue for human rights based upon the classical understanding of natural law and the intrinsic value of human life.<sup>10</sup> Instead of taking the time to point out the fallacious arguments used by the pro-choice camp, I want to point out some of the inherent dangers with respect to human cloning and eugenics.<sup>11</sup>

As science moves forward with the human cloning project, the idea is fostered that some individuals can have total dominion over the existence of others (human sovereignty over life), to the point of programming their biological identity—selected according to arbitrary or purely utilitarian criteria (that the end somehow justifies the means). This selective concept of man will have, among other things, a heavy cultural fallout beyond the—numerically limited—practice of cloning, since there will be a growing conviction that human value does not depend on human personal identity (intrinsic value) but only on those biological qualities that can be appraised and therefore selected (the so-called quality-of-life principle). Moreover, there is this belief, (primarily in secular humanism) that since we have become so advanced in our technology, there exists some obligation to guide the future of evolution in order to create a superior race.

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<sup>9</sup> Rick Weiss, “Patent Sought on Making Of Part-Human Creatures Scientist Seeks to Touch Off Ethics Debate,” *Washington Post*, Thursday, April 2, 1998; p. A12

<sup>10</sup> See my research paper on the shift in American law from Jus to Lex from natural law to positive (postmodern) law.

<sup>11</sup> The arguments are very nicely and logically laid out in Dr. Geisler’s book, *Christian Ethics*, (Grand Rapids: Baker, 1989), pp. 146-154.

The “human cloning” project represents the terrible aberration to which value-free science is driven and is a sign of the profound malaise of our civilization, which looks to science, technology and the “quality-of-life” principle, as surrogates for the meaning of life and its salvation. It is not a far stretch of the imagination to posit a country that would one day finance a program similar to that of Nazi Germany whereby humans were bred to maximize certain traits. Once the “perfect human” was developed, embryo cloning could be used to replicate that individual and conceivably produce unlimited numbers of clones. The same approach could be used to create a genetic underclass for exploitation: e.g. individuals with sub-normal intelligence and above normal strength. One can imagine all kind of evil and hideous scenarios.

### **SUMMARY AND CONCLUSION**

The primary ethical principles and views which favor human cloning are: (1) The quality-of-life principle; (2) human sovereignty over life; (3) the duty to create a superior race; (4) the end justifies the means. Each of these fails to be a valid ethical justification for human cloning.

(1) The quality-of-life principle is just another form of utilitarianism. One has to ask, “What does quality of life mean?” In this case it must mean genetically superior, but that begs the question. Without some absolute standard, there is no logical way to determine what makes a person better. Genetic superiority may make a person arrogant, prideful and greedy. This could lead to a society that may desire to conquer the world. It may cure some physical diseases, but may lead to other atrocities.

(2) To think that humanity is sovereignty over life is fallacious. We did not create the DNA code, we discovered it. Efforts to try and duplicate creating life from scratch have failed. Death has also shown us that it is unavoidable.

(3) The duty to create a superior race is in error. Past attempts by the Nazis should have put that unfounded assumption to rest. Once again this idea assumes that genetic superiority is somehow related to making humanity better. There is no ethical reason why we should do this. “Can” does not imply “ought” any more than “is” implies “ought.” Just because we can do something does not mean that we should do it. Just because we have arrive at the place where we can do it does not make us any better. As C.S. Lewis said, “There is no sense in talking about *becoming better* if better means simply *what we are becoming*—it is like congratulating yourself on reaching your destination and defining destination *as the place you have reached.*”<sup>12</sup> Who says that because we have arrived at “human cloning,” we are better for it?

(4) The end justifies means ethic is not a valid ethic. The only way to know that the ends justify the means, is to know what the end will be. However, we do not know what will happen. Many Germans believed that they could make a better world. They were wrong! Hence, means must have their own justification and so do ends. Not every goal is good, it must be shown to be the case, which once again implies a standard. Also, if good or better ends justified any means, then logically one would have to agree with the Nazis. One could imagine all kinds of parallel scenarios to get rid of all kinds of social and political problems with that ethic.

Apart from the intrinsic value of human life, I see no hope for stopping this potential disaster. Halting the human cloning project is a moral duty that must also be translated into cultural, social and legislative terms. The progress of scientific research is not the same as the rise of scientific despotism, which today seems to be replacing the old ideologies. In a democratic, pluralistic system, the first guarantee of each individual’s freedom is established by unconditionally respecting human dignity at every phase of life, regardless of the intellectual or physical abilities one possesses or lacks. In human

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<sup>12</sup> C.S. Lewis, *God in the Dock*, (Grand Rapids: Eerdmans, 1970), p. 21.

cloning the necessary condition for any society begins to collapse: that of treating humans always and everywhere as an end, as a value, and never as a mere means or simple object.

The proclamation of the “death of God”, in the vain hope of a “superman”, produces an unmistakable result: the “devaluation of human life.” It cannot be forgotten that the denial of the intrinsic value of humanity creates new forms of slavery, discrimination and profound suffering. God has entrusted the created world to the human race, giving us freedom and intelligence. We must set the limits to our actions by learning where God has set the boundary between good and evil. Once again we are asked to choose. We will be held responsible for deciding whether to transform technology into a tool of liberation or to become its slave by introducing new forms of violence and suffering. The difference should again be pointed out between the conception of life as a gift of love and the view of the human being as an industrial product.

The scientist cannot regard the moral rejection of human cloning as a humiliation; on the contrary, this prohibition eliminates the demiurgic degeneration of research by restoring its dignity. The dignity of scientific research consists in the fact that it is one of the richest resources for humanity’s welfare. It loses its dignity when it turns on human life and devalues it. The balance must be kept between God’s creation, science, the good of the person and of society. It is the outlook of those who do not presume to take possession of reality but instead accept it as a gift, discovering in all things the reflection of the Creator and seeing in every person his living image. This ethical question should not divide us, it should be a sober reminder of what unites us as a nation.

Some time ago the top ethicists we survey in order to seek how to get a moral consensus in a country filled with diversity. The focal point of the article was represented by the question, “Who is to decide what are the right values?” After three pages of interviews with some of the finest legal, political and academic minds of our nation, the article culminated with these words,

Interestingly, and perhaps reassuringly, some of the most thoughtful ethicists feel that the elements for an enduring moral consensus are right at hand—in the Constitution and the Declaration of Independence, with their combination of Locke’s natural rights and Calvin’s ultimate right. “It’s all there, it’s all written down,” says Colgate Philosopher Huntington Terrell. “We don’t have to be converted. It’s what we have in common.” Terrell calls for a move “forward to the fundamentals,” in which people put their lives where their mouths have been: in line with the country’s founding principles.<sup>13</sup>

Our founding fathers knew that we needed a basis for moral absolutes and to their way of thinking, God was the basis for truth, life, and human rights, as well as for liberty, law, and justice. They clearly articulated what they believed to be self-evident truths when they declared,

We hold these Truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the Pursuit of Happiness. That to secure these rights, Governments are instituted among men.

I have a fear that if we forget our roots, we will pay for such arrogance. Hence I end with the solemn reminder of the words of Thomas Jefferson, which are inscribed on the northeast wall of his memorial, “God who gave us life, gave us liberty. Can the liberties of a nation remain secure when we have removed a conviction that these liberties are the gift of God? Indeed, I tremble for my country when I reflect that God is just, that his justice will not sleep forever.”

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<sup>13</sup> Ezra Bowen, “Looking to Its Roots,” *Time*, May 25, 1987, p. 27.