

Human Cloning

I. Introduction

A. Background

1. In February 1997 it was announced that a sheep had been cloned at the Roslin Institute in Scotland. The ethical reverberations were heard around the world, not because it was a sheep, but because the possibility loomed that a human would soon be cloned as well.
2. One of the greatest scientific discoveries of the Twentieth Century, and indeed in the history of science, was the discovery of the DNA code in 1953 by Thomas Watson and Francis Crick. They discovered that genetic traits are encoded in the DNA molecule of each cell. The subsequent biological revolution is now upon us. One writer said: *We've developed the tools to shape our own biological destiny, but many question whether we've evolved the wisdom to play God.* (David Rorvik) What this revolution does is invest scientists with the awesome powers of predestination. The ultimate dream of humanism has always been to have the ability to direct its own evolution.

B. Current Concerns

When the cloning of the sheep was announced, President Clinton immediately chose a commission to study the immense ramifications this technology might have for the human race. To emphasize the seriousness of the situation, he ordered them to report to him in 90 days. In this postmodern culture, which has no moral anchor, the potential for abuse and the further degradation of human dignity eclipses our imagination. The purpose of this briefing is to survey some of the implications of human cloning.

(As we were concluding this briefing paper, the above noted presidential commission released its preliminary report. According to Associated Press, the commission is *not* recommending a ban on experimental procedures with regard to human cloning as long as the embryos are not implanted to grow to term! Apparently the commission wants to leave the door open for human cloning in the future as an option for infertile couples.)

II. The Purpose of Science

Science itself is a tool for man's dominion spelled out in Genesis 1:26ff. As a tool,

it is neutral; it is neither good nor bad. With it man can discover, understand, manipulate, rule, and use the resources of the earth to further the Kingdom of God. However, when science as an establishment becomes the final authority it becomes scientism. It assumes the role of god.

III. Definition of Cloning

Cloning as a procedure is the artificial reproduction of an organism which is the exact genetic copy of a living organism. It is a branch of genetic engineering. It is an asexual form of reproduction. Identical twins are natural clones as they are exact biological copies of each other.

IV. The Mechanics of Cloning

- A. There are approximately one-trillion cells in the normal human adult body. In the nucleus of every one of these cells is recorded all the information (software) needed to construct an exact copy of an individual human. The amount of this information is equal to several sets of the 30 volume Encyclopedia Britannica! While this briefing paper will be stored on a hard disk in a binary code of 1's and 0's, the genetic information to make a new individual is recorded chemically in a quaternary code.
- B. The technique used by the scientist in Scotland to clone a sheep was to first remove the nucleus from a fertilized sheep egg then replacing it with the nucleus from a cell of an adult ewe's mammary gland. The trick was to get the enucleated cell to accept the foreign nucleus and then divide into a developing sheep embryo. What the scientists discovered was that very tiny pulses of electricity solved the problem. One week later the embryo was implanted in the womb of a sheep.

V. Possible Reasons for Cloning Humans

A. For Spare Parts

Because of the modern technology of organ transplantation and our postmodern obsession with health, it is easy to assume that a powerful person with a terminal disease, and the means, could commission a scientist to make a contingent of young clones to have available for use as spare parts.

B. Vanity

A wealthy, egotistical dictator wanting to create a dynasty, could clone himself. When the ability to clone is possible, all that is necessary is a willing scientist and someone with the means to pay for the service. This idea was the subject of a book, and later a movie. See *The Boys from Brazil* by Ira Leven, or the movie by the same name.

C. Biological Immortality

By cloning himself someone might imagine that his immortality might be guaranteed.

D. Desired Types

As speculated in the novel, *Brave New World*, Aldous Huxley envisioned cloning special classes of people for specific tasks, i.e., laborers, rulers, etc. Scientists speculate that through cloning and genetic engineering they can create a superior *homo sapien*, even a new species. Controlling and directing the process of evolution is the goal. *In a spiritual sense they believe they can affect man's redemption on the natural level* (i.e., eliminate his violent tendencies). Some have proposed saving genetic material in a kind of genetic bank of famous writers, artists, athletes, etc. which would greatly enhance culture. Some egotistical Nobel winners have already had their sperm frozen!

E. To Eliminate Genetic Disease

There are more than 2500 known genetic diseases. A married couple desiring to have children might discover after genetic counseling that they both have recessive genes for a serious genetic disease. To spare themselves the pain of a defective offspring they then might decide to clone either of themselves.

F. For Sex Selection

Cloning would be another technique for the parents to select the desired sex of their child.

VI. Major Ethical Concerns

A. The meaning of a child is lost

1. In the Christian worldview a child (Gen 3) is viewed as a *gift* not a *product*. The temptation it seems, is that a cloned-child would be viewed

as a product of human ingenuity.

2. God has ordained that human life should be sustained by procreation. Children are gifts of God's grace and are to be conceived in the context of marital love.
3. The child is neither a replica of the father nor the mother. He is an independent being with an entirely unique genetic inheritance. This should remind us of each child's ultimate independence. The child is literally an incarnation of their union.

B. The Possible Corruption of the Gene Pool

Once there are multiple clones in a society there is potential for corruption of the gene pool because it would increase the number of defective genes. Clones who reproduce could also have a high incidence of abnormal births or even sterility, as has been witnessed in cloned animals in the laboratory.

C. The Loss of Individual Identity and Human Dignity

Individual identity is generally not a problem for identical twins, but what if the twin of a clone is the father or some famous personality. Imagine a clone of a Nobel prize winner trying to live up to that reputation, and having the knowledge that he was manufactured! Maybe the best way to get this point home is to ask the question: *Would you want to be a clone?*

*Clonal reproduction introduces something totally new into the world—the mind of a child who knows it is a biological replica of its parent, a child who knows it is largely preordained, a freak who can see biological future mirrored in another person. **The Biocrats**, p. 97.*

*What is a clone, anyway, but a person forced against his will to duplicate a life already lived? Doesn't cloning imply ownership by the parents which denies the child's freedom to develop his or her own nature. **Let Us Make Man**, p. 124.*

D. The Erosion of Personal Reproductive Freedom

Once certain genotypes can be chosen and produced asexually how soon would it be before centralized-planning would subvert personal choice? This question has already been debated by legal scholars.

E. The Personal Property Issue

With the transplantation of body parts, asexual reproduction, and engineered desired genotypes, the legal question naturally arises: Who owns your body? If an all-star athlete is cloned will someone have to pay royalties to the athlete? Will certain genotypes be patented? These are questions that are on our horizon if cloning becomes legal and wide-spread. (For further information on this subject see the book mentioned below: *The body as Property.*)

F. The Destruction of Life

In 1952 scientists succeeded in cloning frogs. In these frog clones only 11 grew normally out 707 attempts. Most grew into grotesque shapes and forms and had to be destroyed. Before the scientists in Scotland were successful in cloning a sheep they also experienced many failures. Out of 277 tries only 29 embryos survived longer than six days. Of these, all died but the one that grew to term. We report this because of the ethical problem that might be encountered in failed attempts in future human cloning. If human life begins with fertilization, then to destroy developing embryos is destroying human life.

G. The Loss of the Traditional Family

The family is one of few institutions or relationships where a person is accepted unconditionally. God designed the two-parent family, a mother and father, for maximum emotional and psychological development. The possibility of human cloning leaves the door open for the alternatives dreamed of by those who would destroy the traditional family. Francis Crick said:

*[I]f we can get across to people the idea that their children are not entirely their own business and that it is not a private matter, it would be an enormous step forward. Quoted in **The Ethics of Genetic Control, by Joseph Fletcher, p. 182.***

VII. Theological Questions

A. Would a cloned human being have a soul?

Since identical twins are clones of each other, it would seem certain that a clone would be a person created in God's image. The clone would be a twin

of its father (if a male clone) or its mother (if a female clone).

B. When is the soul imparted into a fetus?

There has never been a consensus on this question throughout the history of the church. Augustine said: ...*[T]here is nothing certain or decisive in the canonical Scriptures, respecting the origin of the soul.* There are two basic views:

1. The Traducian View: This view teaches that the immaterial part of man (the soul) is transferred from the first father, Adam. In other words, the soul comes through human parents. This view is held by most reformed theologians but not by all, including Calvin himself.
2. The Creationist View: A newly created soul is implanted by God at the time of fertilization. Others vary the time of implantation during the gestation period. This view is held by most Catholics and by the Eastern Church.

C. The Sanctity of Life

The sanctity of life is what it is because it is granted by a transcendent God. Our value as human beings is not based on our IQ, athletic talents, scientific accomplishments, etc. Modern non-christian worldviews base human value on that which is arbitrary, which means that it can change depending on shifting values. When any society concludes that some human life is more valuable than others than we are indeed on a slippery slope. Eugenics did not die with the Nazi regime!

VIII. Concluding Statement

As we have learned from history, the splitting of the atom brought great good and the possibility for great evil. The scenario is no less with the splitting of the nucleus of a human cell.

For Further Study:

Anderson, Bruce L. *Let us Make Man.*

Anderson, J. Kerby. *Genetic Engineering.*

Feinberg, John s. and Feinberg, Paul D. *Ethics for Brave New World.* (See Chapter Nine)

Jones, D. Gareth. *Brave New People*.

Kimbrell, Andrew. *The Human Body Shop: The Engineering and Marketing of Life*.

Lester, Lane P. and Hefley, James C. *Cloning: Miracle or Menace?*

Pearcey, Nancy R. and Thaxton, Charles B. *The Soul of Science*. (See especially Chapter 10 on the Bio-revolution).

Ramsey, Paul. *Fabricated Man*.

Rosenfeld, Albert. *The Second Genesis: The Coming Control of Life*.

Scott, Russell. *The Body as Property*.