

BIBLICAL VIEWS  
ON  
HUMAN CLONING

Paul Mali

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*Books by Paul Mali*

Biblical Views on Human Cloning  
God's Peace Plan for the Middle East  
Ten Bad Mistakes About God  
The Bible as a Rising Civilization

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Human Cloning

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CONTENTS

PREFACE .....vi

Chapter One .....1

SCIENCE AND THE CLONING PROCESS

*Bright future for Biotech capability–Questionable motivators for cloning humans–Short history of cloning–How a complete human can be cloned–Therapeutic cloning–Valid motivators for therapeutic cloning–How therapeutic cloning is accomplished–Parthenogenesis cloning–Value of the begettal human process.*

Chapter Two .....19

GENETIC ENGINEERING

*Benefits of genetic engineered products–Demand for human parts transplants is high–Second Genesis of life has started–Reproductive technology to benefit humans.*

Chapter Three .....31

SCIENCE GETTING CLOSER TO GOD

*Science and religion: two great systems of thought–There is religion indirectly in science–Scientists make mistakes like theologians.*

Chapter Four .....44

SCIENTIFIC CRITICISM OF HUMAN CLONING

*Serious problems with human cloning–Delving into life’s mysteries –Why God allows science to delve into life’s mysteries.*

Chapter Five .....52

GOD’S DESIGN OF BEGETTAL HUMANS

*God’s goal given to humans–Possible God’s design process for begettal humans–Begettal humans in the image of God–cloned*

*humans in the image of the donor–Begettal humans versus human cloning–Begettal humans have “God Spot” in brain–God Spot endowment has seven sections–Begettal humans separate from other creatures–God created begettal humans–Begettal humans have unique individuality–Soul’s not found in begettal humans or cloned humans –Begettal humans recorded in Book of Life–Begettal humans are interdependent with environment and universe–Deviation from God’s design results in disaster–Ten reasons why begettal humans are of design superiority.*

Chapter Six . . . . .90

PLAYING GOD

*Will scientists play God?–What does playing God mean?–Contrasts and comparisons between cloning and begettal–How would you decide?*

Chapter Seven . . . . .95

WHEN DOES LIFE START?

*Overview of the stages of human life–The start of human life–Abortion: symbolic of low value of human life process–Moral debate–Scriptural view of the life processes–Arguments against abortions.*

Chapter Eight . . . . .107

REFLECTIONS ON LIFE’S QUESTIONS

*Composition of the human body–The body systems–Interdependent elements of the universe–The needs of life–Who are we?–What is the meaning of life?–Why are things the way they are?–How can we perceive God–What is the origin of the universe and human life–Why is there evil?–Where are we going?–Will the world come to an end?–Is there a future life?*

REFERENCES . . . . .131

SUBJECT INDEX . . . . .132

# *Preface*

THE POTENTIAL CREATION OF A HUMAN CLONE is generating much discussion and provoking a great deal of debate worldwide. This book inevitably will enter this debate giving it a deepening intensity from a Biblical point of view. The intended contribution of this book is to throw a pebble into the lake of debate with the hope that small, new ripples will influence the direction and content of cloning activity. The issues of human cloning, therapeutic implants, parthenogenesis cloning and genetic engineering involve a great deal of provocative controversies, such as speculative research, clashes in ethical morality, permissible legality and illegality, uncertain cultural expectations and spiritual controversies. It also involves an unprecedented medical advancement never before experienced in human history since the time of the “miracle worker” who lived 2000 years ago.

Since cloning has been going in so many different directions, it may be necessary to identify at least four of these directions. 1) Cloning for experimentation and discovery; 2) Cloning for spare parts; 3) Cloning for producing new humans; and 4) Cloning for disease treatment. As in any new field, research ventures do take off in many directions, but eventually the proper pathway will be fully pursued. We trust this book will help in this pursuit.

The cloning of a human will happen if for no other reason than for research, fact-finding and future need applications. Genetic engineering is moving rapidly ahead and giving humans greater longevity and better health. The motivations of scientists, along with God’s allowance to delve into the mysteries of life are high! After all, the first scientist who clones a human being will attain the hallmark of great recognition and citation.

I have titled this book, “Biblical Views of Human Cloning” to suggest there are Biblical perspectives on several of the related issues. If one accepts the Bible as the Word of God, which this author does, then the Biblical perspectives can be God’s perspectives. Since the potential cloning of a human being is a twenty-first century phenomenon, little can be found in the Bible that directly refers to the cloning process. Nonetheless, precepts, principles and thoughtful

Biblical interpretations can be brought to bear on the issues.

The purpose of this book is to remind everyone of God's original design for human life and how important it is to stay with and perpetuate the original design. The reader needs to be convinced that God's original design of human life is by far a superior design than any other planned alternatives or deviations that can be conceived or initiated. It is hoped the involved scientists will come to this conclusion after they have exhausted the alternatives. The present method that God has adopted certainly resulted from many conceivable alternatives He considered in the design thinking.

At this writing, it is unclear as to the specific direction of cloning research. The U.S. Congress, both House and Senate, have bills introduced that will outlaw the procedure for human reproduction, but permit it for research on stem cells. Hearings are being conducted at this time before the Senate Judiciary Committee. Many of the opposing views of all forms of cloning revolve about theological issues, such as whether life begins at conception and what the allowable variations of life forms are. The big issue, is of course, stem cell research and its applications.

Here are some definitions for this book.

1. Cell - The cell is the most basic structural unit of organic life. The cell can be called bio-life. The human body has more than 10 trillion cells. These cells can be seen only with a microscope. Each cell, singly or in groups has a well defined functional role to execute in the body. Within the cell are the genes that define the units of heredity, propensities and characteristics. Therefore, cells are subject to certain disorders that influence the conditional health state of the body. Certain cells can group together to form tissues. Different kinds of tissues are collected together to form organs, such as eyes, hearts and lungs. Cells are alive. They breathe, take in oxygen and food and get rid of waste. It also grows, reproduces, and in time, dies. If a cell is broken up into pieces, the pieces are no longer alive. Cells reproduce by dividing.

2. Genes - Genes are elements within a cell that define the characteristics of heredity consisting of propensities, uniqueness, gifts and traits. Each cell has tens of thousands of genes, which occur in

a threadlike substance known as DNA. DNA is packaged with structures called chromosomes. Gene therapy or engineering is the act of inserting a new or different gene into a patient's cell.

3. Chromosome - A dense structure found in a cell nucleus, which carries the DNA (deoxyribonucleic acid) of an individual. Within the DNA are the genes, which specify the physical characteristics of a human being. Someone suggested a simple analogy: yarn = DNA. Ball of yarn = chromosome. 46 balls of yarn = complete human genome within a single cell. Genes are changing colors along the length of yarn.

4. Clone - A clone is a duplicate from an asexual reproduction process, which yields genetically identical DNA molecules. Asexual reproduction creates offspring in the absence of sexual activity. For example, it is to bring about life of a human, independent of the normal sexual process between a male and female. It is producing babies without sex. It also involves buying and selling sperm and human eggs. It could also lead to three mothers and two fathers.

5. Cloned Human - Forty-six chromosomes are needed to originate a human, 23 from a male and 23 from a female. But a cloned human receives all 46 chromosomes from a single donor often called a parent donor. Cloning requires removing the nucleus from any cell of the body fusing it with an egg cell that had its own nucleus removed to form a growing pre-embryo.

6. Clonee - They are copies of the parent donor, or donor DNA. Clonees are designed children. See Figure 1 for the symbol to be used in this book.

7. Begettal Human - This is a human offspring procreated by two parents, a male and a female. This procreation is the conception and start of life through the sexual process uniting a male sperm with a female egg. Twenty-three chromosomes are contributed by the male, and twenty-three chromosomes are contributed by the female. The 46 chromosome offspring is not identical with either parent, but combines features from each parent in both a dominant and recessive genealogical arrangement. The offspring, through this process, is genetically unique, individualized and is not a copy of either parent. It is a divine arrangement that perpetuates individuality and not

duplicity.

8. Genetic Engineering - This is the manipulation of the DNA content of an organism to alter the nature, function and life specifications of that organism.

9. Genome - This is the sum of all genetic information in a cell of an individual. The genome expresses the characteristics of an individual that results from the cloning process.

10. Genetic Identity - In the case of a clone the potential and propensity for a clone to do and look like the parent donor and to have the same traits as the parent donor. The potential and propensities of the clone are not exactly identical to the parent donor, since there are subtle mutations and changes in the cloning process.

Note: all definitions in this section are in terms of a clonee, but they could apply to normal begettal humans as well. See Figure 1.

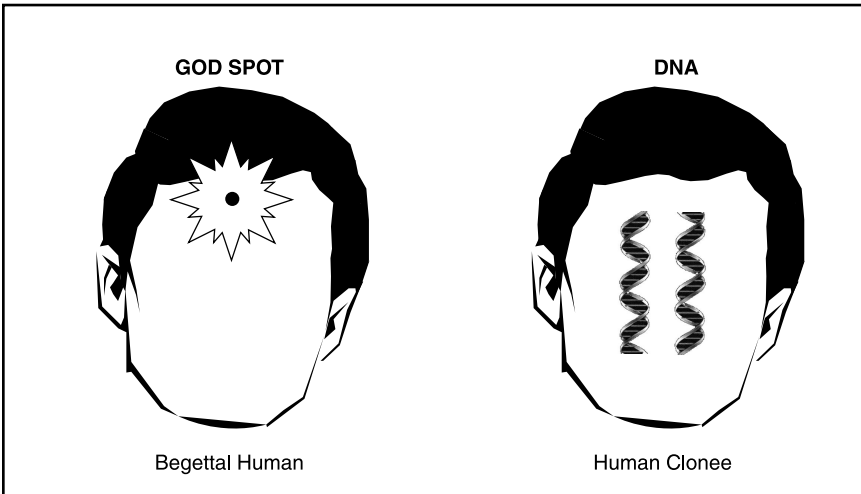


Figure 1 - Symbol of Begettal Humans and Human Clonee

11. Personal Identity - In the case of a clone, this results from combining potential and propensities of a human donor with the clone's desires, intentions, beliefs, memories and experiences.

12. Blastocysts - A stage in embryonic development when the embryo forms hollow spheres, which contain stem cells that are matched to donor cells.



13. Stem Cells - These are cells collected from blastocysts for therapeutic treatment in a range of malfunctioning conditions in an ailing human.

14. Therapeutic Implants - This does not deal with producing babies, or duplicates or clonees. It is a genetic procedure from a patient's own cellular structure, known as a donor, to generate stem cells in the blastocyst stage of development to reintroduce for a donor's ailments.

15. Parthenogenesis Cloning - This is an asexual process, without the use of sperm, to make stem cells for creating new tissues.

16. Bio-Life - This is ability of a cell to use energy for establishing:

- a. order out of disorder
- b. awareness out of unawareness
- c. action out of inaction
- d. learning out of dis-learning.

The cell has inherent information and programming to reproduce itself. Cells can interact to structure themselves into a complexity. The structure becomes conscious of environment, surroundings and the causes that initiated its complexity.

17. Concept Life - There are many views of how and when life starts. Some say life starts when a baby is severed from its mother (umbilical cord is cut). Some say life starts after 3-4 months of pregnancy. Still others say life starts at conception. This author believes life starts at conception, that is, when a female egg is fertilized by a male sperm. This conception is of divine arrangement and is therefore, sacred. As long as a male sperm is kept separate from female eggs, life is prevented, and inhibited. Chapter 7 will describe this process in more detail. It should be emphasized that different life forms for generating life deviates from God's original design.

The promise and direction of the biotechnology industry to feed a hungry world, increase sources of energy and produce healthier humans through reengineered parts is a valuable and worthwhile effort of science, universities, governments, social agencies and religious organizations. This author favors and supports the movement in

this direction. The genetic revolution brought about by computer development and relating it to human needs, is bringing together unique elements to form a powerful new reality. The cloning of plants and animals promises a new era for the agricultural industry. On the other hand, the cloning of humans conflicts seriously with Biblical traditions and expectations and should be rejected. However, therapeutic implants do not produce duplicate copies of human beings. Instead it creates stem cells, which can be given back to a donor to treat and cure serious and life threatening problems. This therapeutic procedure is an innovative, vital and beneficial effort.

At the onset of this book, the author's position in these issues are made clear:

**GENETIC ENGINEERING FOR PLANTS, ANIMALS AND HUMANS: YES!**

**CLONING FOR ANIMALS: YES!**

**CLONING FOR DUPLICATING HUMANS: NO!**

**CLONING SIMULATION FOR THERAPEUTIC IMPLANTS AND DISEASE CURING THROUGH STEM CELL APPLICATIONS FOR THE DONOR: YES!** (This will be called therapeutic implants in this book.)

This book has been written to give credence and support to this position. Concerns, such as cloning the soul will be included, as well. How does the resurrection and retrieval of the dead fit in? The brain cannot be cloned. When does life start? How can a cloned human be entered into the Biblical Book of Life? These and other issues are addressed in this book. Cloning has been thought of as a miracle. Should we thank God for it or should we thank God for allowing us to play God? The expression "Play God" is intended to apply to those who go beyond limits God has set down in his design of creation. To transgress these limits implies high risk taking with the unpredictability of destructive effects for the present as well as future generations. Did God make cells, molecules, DNA, etc., unseen to human eyes in order to cover them and prevent probing and changing what He has done? Of course, Gravity for example, is unseen, yet we have anti-gravity devices, such as airplanes and helicopters. The nature of light is still a mystery as to what it is exactly, yet we have

devices to generate light. Cloning gives us an opportunity to think about life/death issues in general. If the focus is on genetics and the cell in the context of our relationship with God, His program and processes, we will be brought closer to God and His purposes.

Many thanks are offered to the growing number of genetic engineers and bio-therapists for providing a good deal of historic materials and numerous responses to technical questions. At the end of this work there is a comprehensive reference section and subject index for the continuous interest of the reader.

Paul Mali, BSE, MS, PhD  
New London, CT 06320

# Science and the Cloning Process

“...he that teacheth man knowledge, shall not he know?” Psm 94:10

Science and technology have achieved marvelous feats over the many centuries making living easier and more comfortable with enhanced health, while solving major problems. The achievements are historic. See Figure 2. There are already 1,400 biotech compa-

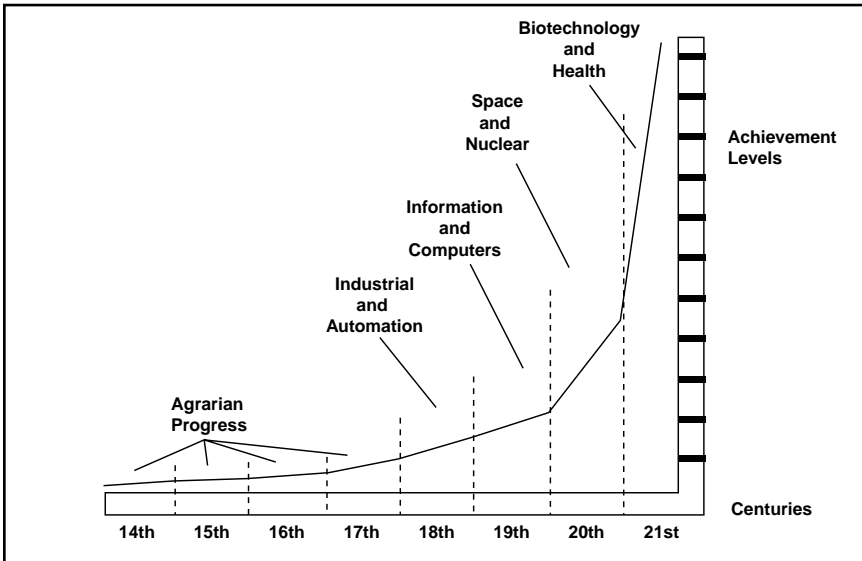


Figure 2 - Achievements Over the Past Centuries

nies in the United States alone, with a total of over 14 billion dollars in annual revenue and more than 125,000 working employees. This rapid development has occurred only recently and is likely to expand for many years to come. The new biotech and health industry is reshaping other fields.

How can God function in a world where science is solving past, present and future problems? The problems involve life and its future

continuance. Will God break His silence and come closer to humankind and deploy His power, energy, skill and know-how? Or will science do it? If science does it, will that mean God has been replaced, or does it mean God is using science? Here is a list of current difficulties for which science is actively seeking solutions.

- a. Controlling and removing the catastrophic conflicts with violence between and among political powers of the world.
- b. Re-fabricating humans with organ transplants, DNA modifications, artificial hearts and parts, personality changes for criminals, and the movement of humans to a higher level of existence.
- c. Reducing instability and unrest of 80 percent of the total population called “have-nots,” who have become an economic force pursuing what the “haves” have.
- d. Removing cancer from the human family by deciphering and manipulating the genetic code to reverse cell malignancy.
- e. Adjusting major environmental and weather changes and even bringing bizarre and destructive hurricanes, storms, tornadoes and heat waves under control.
- f. Controlling exponential population growth that now numbers six billion and may double to twelve billion by 2010. With the doubling of population, fixed highways, facilities, shelter, energy and water cycles need to be adjusted to meet the larger population.
- g. Boosting memory capacity and perceptions through heredity, eliminating congenital defects, pre-natal transplanting of embryonic tissues, and cloning for animal transformations.
- h. Addressing the needs of growing cities by abating famine through food distribution and promotion, supplying clean water and eradicating low socio-economic living areas.
- i. Operating high technological productivity and information technology to accommodate large masses of people to work, eat and reside in high density living quarters.

The problems and solutions pre-figure an exciting future. One can see that these solutions pre-figure the Kingdom of God on earth. (1 Cor 2:9)

#### BRIGHT FUTURE FOR BIOTECH CAPABILITY

Science, through a new industry called biotechnology can alter the physical, emotional and intellectual make-up of man. What a person inherited from parents need not be continued, especially if

the inheritance is defective! Family-like traits and characteristics can be interrupted and changed. Through genetic manipulation, certain characteristics such as the propensity for becoming overweight or bald, or near-sighted or far-sighted, small or big, ugly or handsome, can be improved upon. Scientists are even able to boost intelligence, remove genes that cause depression, replace genes to prevent inherited diseases, slow down or stop aging and many other scourges that have been a part of medical history. In fact, people need not be sick, before doctors can take steps to make them well. Since a patient's entire DNA sequence will be recorded on a computer, it is the computer that will recognize genetic predisposition to diseases and take pre-emptive action. It is the knowledge of the functioning of cells that has made this possible. The cell is such an integral part of human vitality. See Figure 3. An egg cell from which every person has developed weighs approximately one twenty-millionth of an ounce. An adult emerging from this cell is roughly fifty billion times heavier. This fifty-billion-fold increase in weight has resulted from the consumption and assimilation of food. However humans are not just piles of cells nurtured by groceries, but are composed of transformed cells, which enhance growth, maturity and life.

Genes are the cellular blueprints, which receive and transmit information that governs how the cells will respond. They are the means for reading, writing, talking, seeing, hearing, feeling, smelling, jumping, running, walking, crying, laughing, hoping, loving and singing. When genes are impaired, the influence is negative. When the genes are healthy, the influence is positive. See Figure 3 for more insight into cells. It must be remembered that biotechnology remains an extractive and improvement industry. It can "mine" genetic materials, adjust and mutate these materials, remove and insert better genes, but this industry cannot create even a single gene. Therefore, a big case for God and His ability can be made. Genetic Engineers are accomplishing much, but they cannot create one simple, small gene. The design and creation of these marvelous genes are only found in God's creative arena. "I am the Lord, and there is none else, there is no God beside me." (Isa 45:5) With genetic engineering, faulty or weak genes can be corrected or replaced. Once this is done, few people will die from diseases, illnesses or inherited weaknesses

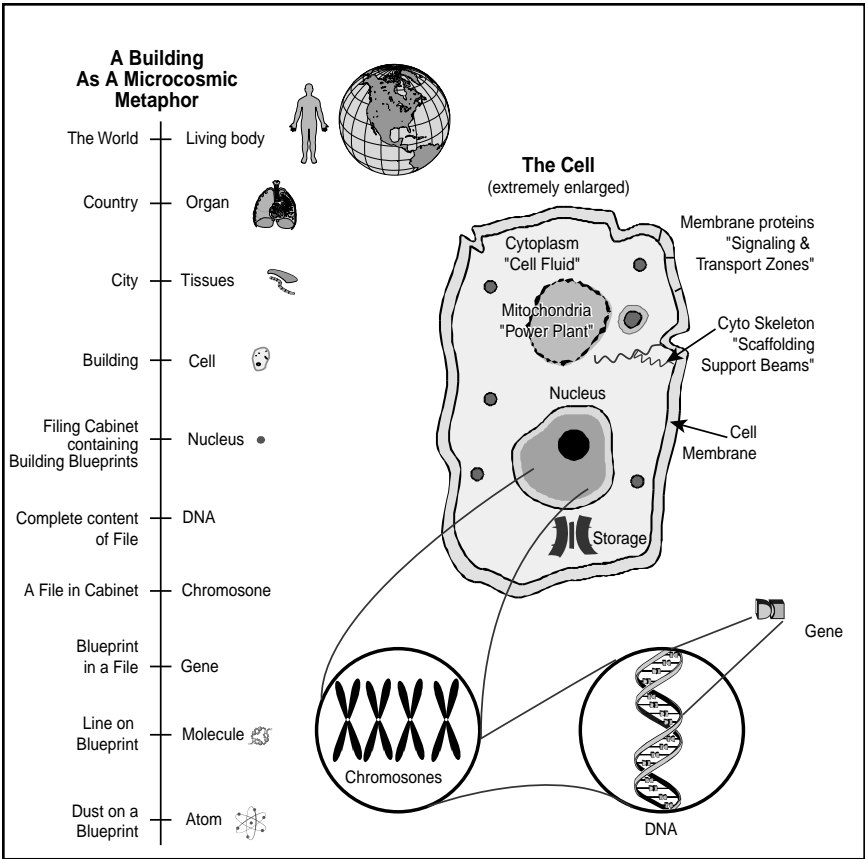


Figure 3 - The Library as a microcosmic Metaphor to Illustrate Relationships among Tissues, Cells, DNA and the Genes

of any kind. The only leading causes of death, when genetic manipulation is thoroughly employed, would be accidents, environmental disasters, or global cataclysms. Genetic engineers predict this will come about by the end of the next century. The manipulation of genes will eventually include the age genes, once they are identified. The aging process can be reversed! People can be made younger! In 1900, life expectancy was 40; now, it is 77. By the end of the next century, it is expected to rise to 150. Of course, this is due to a wide range of factors not just genetic manipulation. Living forever is no longer just philosophy or theology. It is moving toward a reality! Can society handle this extended life span in which so few die before the age of 100, 150 years or even 200 years? Will crucial steps need to

be taken to curb population growth? Who will be privileged to receive the benefits of genetic manipulation? The Bible has for some time predicted a future life extended to eternity. (Isa 57:15) Are we now experiencing the preliminaries of this future life? (Gal 6:8; Jn 3:16) It is interesting to note how genetic engineers are attempting to build a better crustacean. Scientists at the University of Connecticut transplanted a foreign gene from an insect into the sex organs of a crustacean. The experiment worked. The crustacean was re-engineered. The result is that there now can be abundant breeding of lobsters, crabs and shrimp. They will also look better and taste better, and will have the ability to resist all sorts of parasites and diseases. For a growing population, greater food availability is crucial. Sea farmers will now become competitive with land farmers.

It is also interesting to note how seed companies are applying genetic engineering to vegetable plants. New genes are spliced into their chromosomes, which gives them enormous yields and makes them more resistant to insects and parasites. Again, when one sees the population of the world growing exponentially, the need to feed this population becomes critical. Transgenic crops have the power to increase food production in Third World countries with minimal environmental impact. Transgenic plants can feed billions. This process can result in a 15 to 20 percent increase in yield. Increased crop yield is needed to feed animals since Third World populations are eating more meat. There is one big concern. Some plants, such as weeds, have a promiscuous sexual habit. Sperm are found within pollen grains produced by the stamens of other plants. The grains are then carried by the wind or insects. If the grains fall on weed female organs, it will enhance production of weeds. More work needs to be done to enhance transgenic vegetable crops without the growth of weeds.

By 2010 AD, scientists hope to have identified every gene in the human body by name. It is thought each of us have innumerable genes among 23 pairs of chromosomes in human cells. The goal of genetic engineering is not to replace or transplant a damaged heart valve, but rather to grow a new one. In many cases it means entire organs will be grown from patients' own tissues and implanted to replace old ones. Mapping genes will allow scientists to correlate sil-



icon-based processors with the individuals to be changed. It is truly re-fabricating the parts of a human. When the complete genetic code is deciphered, the secrets of life will be revealed and improvement of life will then be possible.

However, there are dangers. Genes that seem deleterious may not be necessarily so. They may be present to create variety and diversity in humans. If genetic engineering makes us all approximately the same, society will be cloned. This works against God's purposes for diversity. Perfection of people, as well as perfection of society does not mean sameness. Our present design in nature, with variety, results in beauty and reduces boredom. Additionally, the Food and Drug Administration (FDA) in the United States has cited violations of federal research regulations, when certain research has brought about the death of research subjects. The FDA, in some cases, has halted or suspended gene therapy. The FDA wants gene therapy to slow down until it is considered safe by the government. Thus far, over 5000 human subjects have participated in 350 clinical tests with no harmful effects. But the majority was harmful. The FDA has provided a good wake-up call to scientists for going too fast and too far. These issues deal with life and death. Paul Choiniere, in an article on genetic engineering, uses two religious terms - "re-create" from the Biblical creation and "living on" from the Biblical expression eternal life. He parallels the promises God has made to humankind. (Titus 1:2) The specific Biblical words are "...times of restitution of all things..." (Acts 3:21) Again, science and technology are moving closer to God but with just a different language. It seems instead of replacing God, science and technology are making God's promises come true! This means biomedical research is pursuing an important goal of helping the sick, finding remedies for ailments, and producing therapies for relieving suffering. Scientists have not lost sight of this major goal. The first stage is a quest for understanding life's basic processes. Other stages are applying that understanding to the betterment of humanity.

#### QUESTIONABLE MOTIVATORS FOR CLONING HUMANS

Cloning of vegetables has been going on for some time. Cloning of animals has recently arrived! Cloning of body parts and organs are

next. Cloning of a complete human is down the pike, if allowed. Basically a clone is similar to a twin, a triplet or a quadruplet. A human clone is not an exact duplicate of the DNA donor. Cloning of animals is accelerating throughout the world since it results in many benefits. See Figure 4. Cloning of animals is becoming a widespread

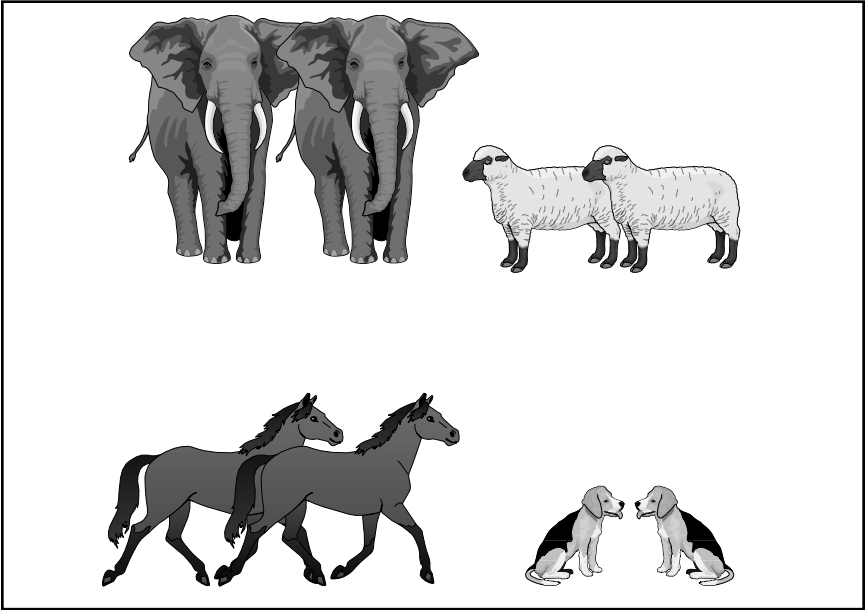


Figure 4 - A Clone is a Representation of the Donor

industry. A sheep named “Dolly” was the world’s first clone from an adult cell. It happened on February 29, 1997, under the supervision of Dr. Ian Wilmut. Cloning is the process of manipulating a cell from one being so that it will grow into a genetic copy of the being from which the cell was extracted. The genetic copy of human or animal will share all of the physical characteristics of the donor. Since Dolly was cloned from an adult mammal, it may now be possible to clone humans sooner than previously thought. The cloning of animals will soon not only be practical, but also commercially viable.

Dolly was not an absolute, 100 percent copy or replica of the old ewe that donated her first cell. This ewe might be called Dolly’s clone mother. Dolly is not as similar to her clone mother as the closeness of two identical twins. Here nature God’s way does a better job of

copying than human cloning. Dolly is merely a nuclear DNA clone. Cloning is, therefore, a form of asexual reproduction. Nonetheless, the clone offspring is nearly identical especially in appearance.

What are the basic motivations and justifications cited by some scientists for wanting to clone a human? Here is a short list:

1. Pure curiosity. This is the usual scientific interest and motivation of wondering if something can be done and to proceed to do it. Curiosity is the drive and search for truth and understanding by scientists. It is the freedom of scientific inquiry, which is what makes science, a science. Scientific inquiry is by far the greatest motivation for cloning a human.

2. Reserves for health emergencies. Human cloning potentially would give everyone their own source and reserve of therapeutic cells for disease control, organ transplantation and tissue splicing. The need and demand for organ transplantation is so huge that a large number of clones would be needed. This would increase the chance of curing cancer, heart and lung diseases, degenerative disorders and visceral and inflammatory diseases. Some think cloning for parts and body tissues will be of huge benefit to parent donors even though it requires killing a clone for the parts!

3. Providing a clone to the infertile. There are many infertile individuals or couples who would welcome the capability to clone offspring identical to oneself as a substitute for their inability to produce a normal offspring. There are over 100,000 infertile women who would welcome a clone as a substitute for personal pregnancy.

4. Vanity. People with money, political clout, or having celebrity status have often expressed a desire to be cloned. Duplicating themselves appeals to their sense of vanity and perpetuity.

5. Replacement of a loved dead relative. This motivation of cloning is an attempt to perpetuate a loved one who is dying or has died. This implies a different form of resurrection or retrieval of the dead. Of course, personal identity cannot be retrieved, from a dead or dying individual; however, it can be accomplished for a dying child. A clone for a dying child is a strong motivation.

6. Aging and longevity research. There is continuous research for

the aging process and life expectancy. Cloned humans could be a source of human cells or tissues for experimentation with the purpose of reducing the aging process and increasing lifetime longevity. The research would center on a study of genetic aging and longevity. The need to study cellular differentiation is serious and important.

7. Creating immortality. This means creating a clone to perpetuate one's life, identity and personality far into the future with unending time. The parent donor is basically the original one that is perpetuated. The research would center on genetic perpetuating factors and their breakdowns.

8. Recreating past heroes. This would be cloning such persons as Albert Einstein, Ludwig Von Beethoven, Franklin Roosevelt, Martin Luther King Jr., Joe DiMaggio or other important people. It would be like resuscitating these highly capable ones back to life. Although scientists are certain that a DNA clone can be developed, they are not certain how much the clone will perpetuate the talents, inclinations and capacities of the original human.

These eight motivators are summarized in Figure 5.

Are these motivators cited above important enough to bring hundreds of clones into the world? It is similar to sharing motherhood. Are these motivators strong and important enough to circumvent God's existing arrangements? It is as though a mother may become a father! Creating a new form of human being to life is both serious and sacred. Having babies without fathers! This may be trivializing God's ability. It may be changing God's original design. It may be adjusting God's method of retrieving and resurrecting the dead. The human cloning design method must be compared to God's design method for human life. The advantages and disadvantages for each should be delineated. Where will cloning lead us to? Interesting to note that Ian Wilmut, the scientist who cloned "Dolly" insists that no good reason existed, in his view, to clone humans. There is a reluctance among other scientists to clone humans. In fact, there is an overwhelming condemnation in the scientific community. Many scientists, feel a deep sense of revulsion in regard to human cloning, especially those who are morally sensitive people. More will be said in latter chapters to reflect on the controversies. These eight motivators are summarized in Figure 5.

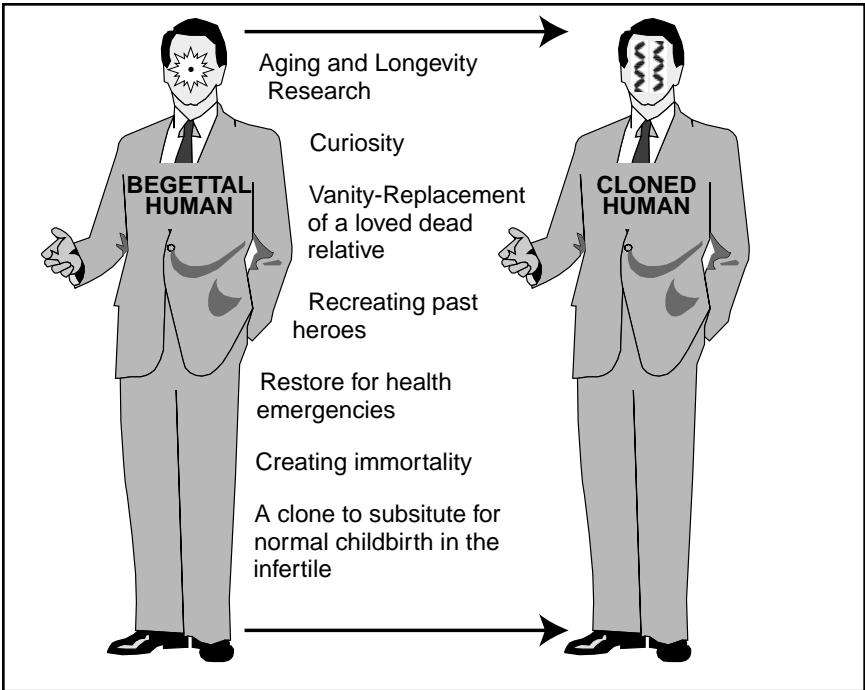


Figure 5 - Questionable Motivators for Human Cloning

#### SHORT HISTORY OF CLONING

- 1938 - Embryologist proposes the concept of cloning.
- 1952 - Attempts known as nuclear transfer, to clone frogs failed.
- 1953 - DNA, which contains genetic information, is discovered.
- 1967 - Frogs are successfully cloned.
- 1975 - Rabbit successfully cloned using embryonic cells.
- 1984 - First sheep is cloned from embryonic cells.
- 1985 - First pig part used with altered genetic makeup.
- 1997 - First sheep cloned using adult cell.
- 2000 - Monkeys, calves, goats and mice are cloned with embryo splitting.
- ? - First human cloned.

The history of cloning is brief, but the number of researchers in this industry is large. The potential for what cloning can do is great. The cloning industry involves a global effort consisting of many scientists from many nations.

#### HOW A COMPLETE HUMAN CAN BE CLONED

There is a temporary ban on cloning of humans by the U.S. Government and the scientific ethics committee worldwide. The purpose is to examine the implications of the new developments. Presently, more than 100 people, each paying \$200,000, are waiting to be cloned. The delay will allow scientists to “re-look” and “re-examine” the methods and approaches to handle this spectacular process of redesigning humans. The present scientific process for cloning a human is seen in Figure 6.

#### THERAPEUTIC IMPLANTS

Therapeutic implants is known as a therapeutic procedure for assisting in seriously diseased people. This new effort does not produce human babies or duplicates a complete human or does it clone dead heroes or famous people. It should not be confused with human cloning whose interest is to duplicate a donor human. The object of therapeutic implants is to make healthy new cells, termed “stem cells” to be implanted into diseased or seriously ailing patients who need life/death help. The procedure is to use genetic material from a patient’s own cellular structure (known as the donor) to generate new cells. These new cells are infused back to the ailing donor for a medical cure. The word “therapeutic” means remedial aid for curing a patient’s ailment. This procedure is a new development at this writing. See Figure 6. It is still in the research phase, but the prospects of what it can do are within reach.

Of course this field has immense challenges for scientific, legal and religious thought. Since human cloning has generated much debate and disagreement, therapeutic implants has been better accepted with little disagreement.

There is a compelling mandate to alleviate human sufferings of all kinds. Jesus Christ, himself, spent a remarkable amount of his

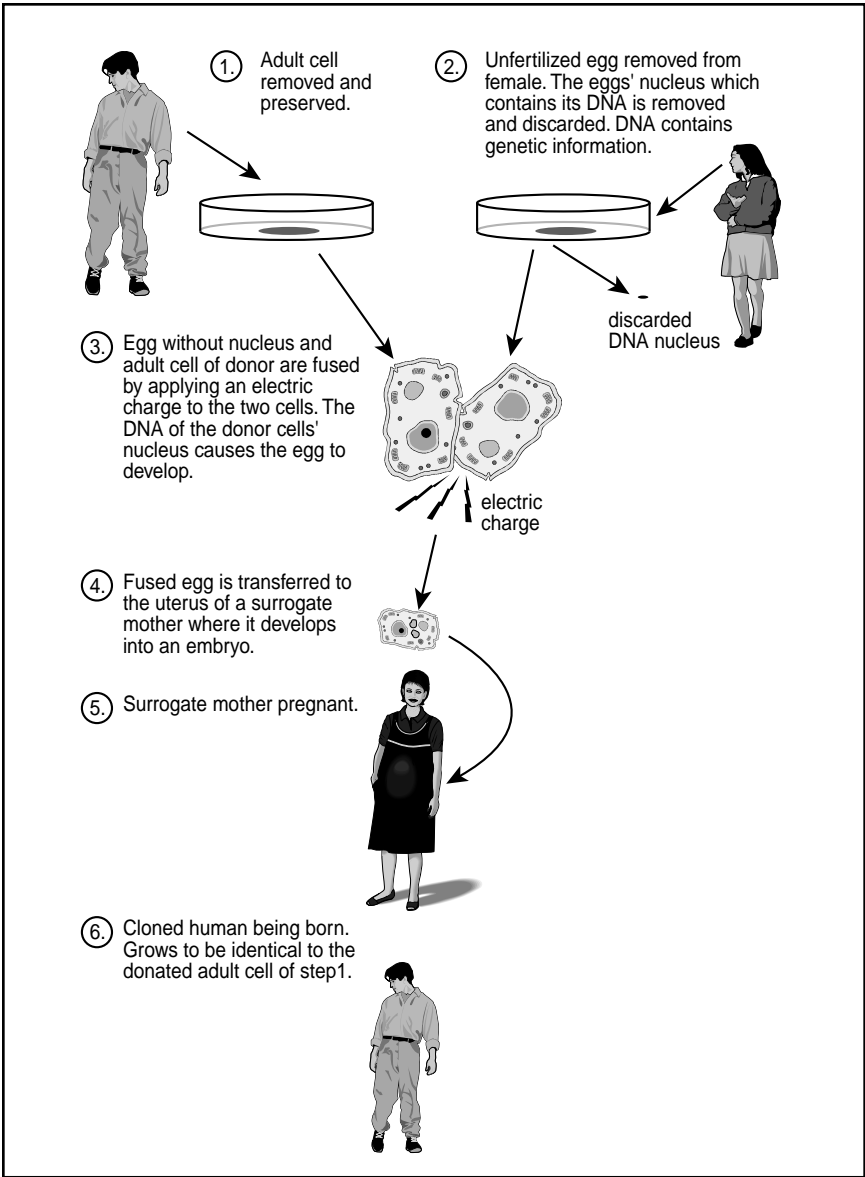


Figure 6 - How Humans Can be Cloned

time on earth healing the sick and alleviating pain. If the miracles of Jesus were categorized, they could be tabulated by number. See the following tabulation:

1. Post-resurrection appearances - 12

2. Healing of the sick and the diseased - 9
3. Controlling or changing the natural environment - 8
4. Miracles on the Sabbath - 7
5. Cleansing of demon possession - 5
6. Opening eyes of the blind - 4
7. Restoring body parts to function - 4
8. Supernatural interventions - 4
9. Curing the deaf and the dumb - 3
10. Raising of the dead - 3
11. Relief of hunger by feeding - 2
12. Dematerialization to be seen - 2

To try to do the same is in many ways following what Jesus did 2000 years ago. When the promise and expectation of genetic therapy can be made useful, it is hard to argue against it when potential is for human welfare. In fact, the healing potential is so great that it is hard to join those who want to stop the genetic research or do not encourage therapeutic applications.

Here is a list of possible cures by use of therapeutic implants. One can see an immense promise to bring the health of a human to a new cultural living level. If God is about love and life (Jn 3;16; 2 Tim 1:1) then we should do everything we can do to end suffering and death. (Heb 2:15; 1 Pet 2:19)

1. Generate new pancreatic islets to treat diabetes.
2. Replace nerve cells to repair damaged spinal cords.
3. Treatment of defective cardiovascular conditions from cellular deficiencies.
4. Regenerating damaged or diseased tissues.
5. Replacing malfunctioning cells in Parkinson's disease.
6. Repairing paralyzed spine cells to de-paralyze the victim.
7. Infuse new tissues in brain to retard Alzheimer's malady.
8. Replace cells of cancer victims in blood or bone marrow.
9. Treat brain tissues damaged by strokes.



10. Treatment of AIDS.
11. Replace organs in ailing human bodies.
12. Improve on the autoimmune disorders of white blood cells.
13. Strengthen heart muscles to deal with congestive heart failure, arrhythmias and scarred tissues.

The therapeutic implant procedure is distinctive and different from reproductive cloning. Reproductive cloning implants a fertilized embryo (egg fertilized by sperm) into a woman's uterus, which leads to the birth of a clone baby. The risk and danger for the mother and fetus is extremely high. Therapeutic implants do not use sperm! Therefore, without a fertilized egg, sperm and egg united, the development is not a human but rather growing tissue. That being said, a clone is not completely human since it lacks male and female donors. The tissue generates new, healthy stem cells to return to the donor for curing a malfunctioning body part. Embryonic stem cells appear four to five days after the infusion of the egg with the nucleus. If the technique can be mastered, stem cells can be steered and aggregated to a particular path. Stem cells have the habit of taking off on their own paths. The new development can help millions of people with health problems. The breakthrough is matching stem cells to the patient's genetic makeup.

#### VALID MOTIVATORS FOR THERAPEUTIC IMPLANTS

There are valid motivators for scientists to undertake therapeutic implants. See Figure 7 and 8.

1. Assist life help that is desperately needed. The need and demand for organ transplants and transplanted for damaged tissue is so huge that in many cases the demand will never be met. Therapeutic implants has the potential to satisfy the demand for human parts and damaged tissue. We have always known humans were dying with imperfect bodies, (Gen 2:17) but we now know what a huge problem it is to try to alleviate the suffering and dying process. The hope of deliverance from this dying state still lies within Christ. (1 Cor 15:22) What a great contribution it would be if science could give life help that humanity desperately needs. What a great confirmation of faith to know that God is using science!

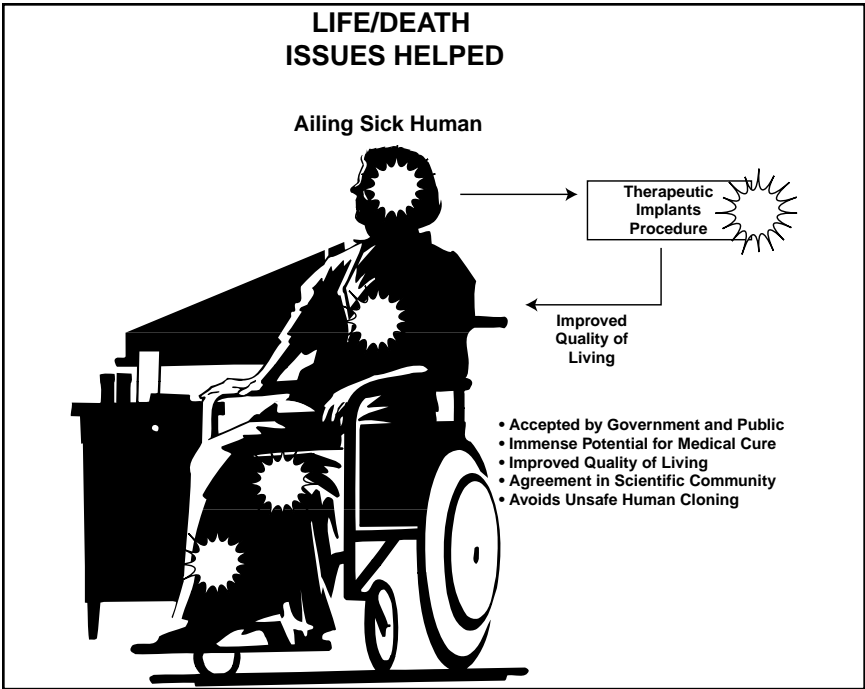


Figure 7 - Motivators for Therapeutic Implants

2. Reproductive human cloning unsafe and dangerous. Reproductive human cloning is uncertain, unsafe and dangerous. Cloning of animals has often failed resulting in either animals dying in the womb or being born with severe deformities. Even Dolly, the first cloned sheep who has since given birth to six lambs has a severe case of arthritis, which did not develop until later in life. Events such as these raise doubts about animal cloning.

Therapeutic implants is feasible, safe and most useful. It settles the argumentative difference between trying to reproduce a human being through cloning and trying to restore or cure a failing human being using the same technology. We may draw the conclusion that cloning an individual should be forbidden, but implants of one's parts to save one's life should not.

3. Therapeutic implants more acceptable than human cloning. The moral and ethical questions of human cloning stir up an impassioned, emotional reaction from a religious and ethical standpoint among moralists that can never be quelled. The claim is that science

is interfering with the sanctity of human life. But, conversely, the public in general and scientists and moralists specifically, would be receptive and in agreement with therapeutic implants for the treatment of disease in failing patients.

4. High potential for medical cures. The medical profession has confirmed more confidence and credibility for therapeutic implants than human cloning. Stem cell research has already recommended supporting therapeutic implants. The demand for cures is intense and high.

5. Agreement among scientists. The scientific community is greatly divided over human cloning. Some demand a ban and some advocate a wait and see approach as further research is evaluated. Therapeutic implants on the other hand, brings agreement and unity among the scientists.

6. Improved quality of living for victims. Victims of or deficient hereditary health have an opportunity to improve their health and the quality of their lives in such areas as thinking, longevity, learning and activity. The needs of life can be met with greater satisfaction, enjoyment and fulfillment.

#### PARTHENOGENESIS CLONING

Biotechnologists are creating a fast and dynamic industry. Even writers in the field are having difficulty keeping up with the changes. Scientists are moving quickly toward creating stem cells asexually (without sperm fertilization) for medical applications. The pharmaceutical industry envisions this technique being used to develop a whole new set of drugs for bettering the health of humans.

Parthenogenesis is an alternative to therapeutic implants. The end result of the process is to collect and store stem cells. Its primary thrust is to use chemicals and electrical stimulation in the fusion of the donor cells nucleus with the female egg. This process, while still in the research stage uses monkeys. The criticism of this technique is that the application would be limited to women of reproductive age, but without the benefit of males. As the chemicals used in the process reach the eggs, they deceive the eggs into thinking they are being fertilized. The egg proceeds to become an embryo with blastocyst

# How Therapeutic Implants Are Accomplished

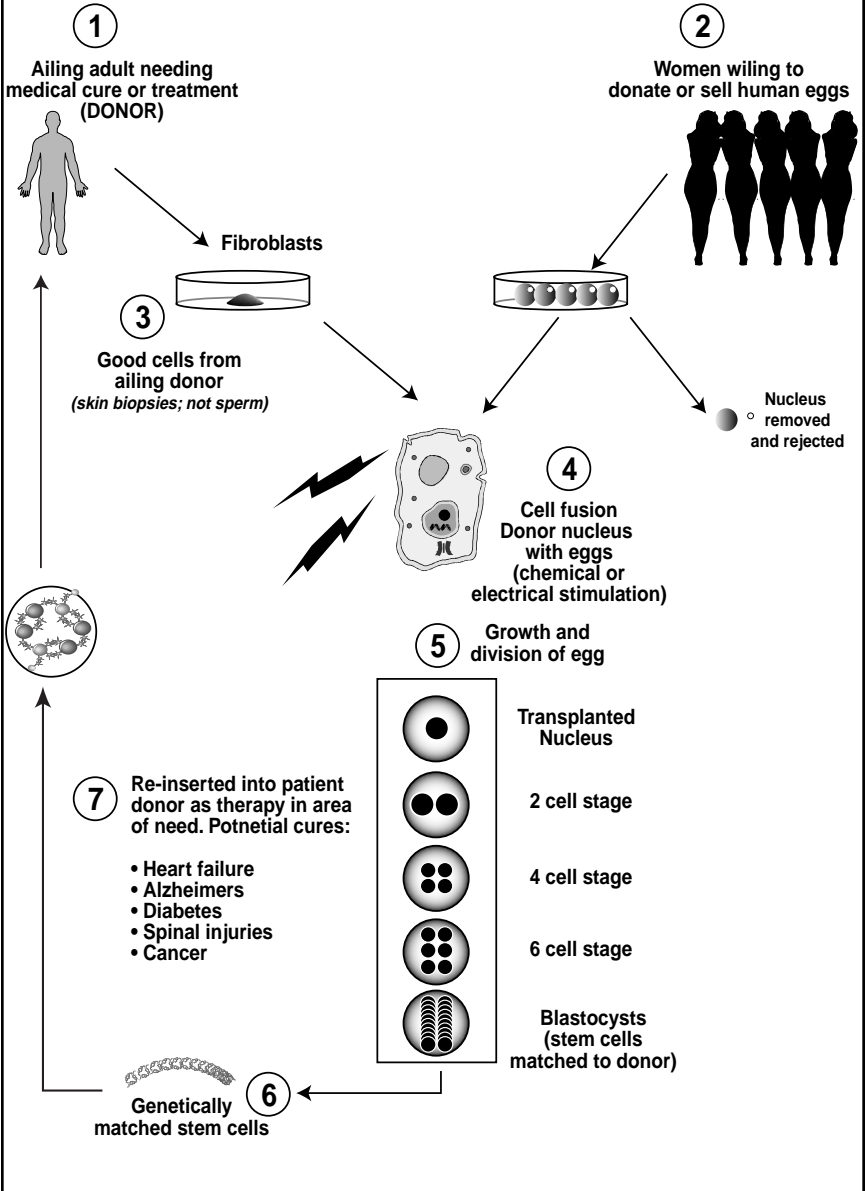


Figure 8 - Simplified View How Therapeutic Implants are Accomplished

properties. Stem cells are then removed from the blastocyst and inserted into an ailing patient.

This is a new area, highly specialized and highly classified to companies and research teams. This author sees many other techniques emerging from parthenogenesis in the future.

#### VALUE OF THE BEGETTAL HUMAN PROCESS

A majority of Americans in a recent poll by Time Magazine indicated that 93 percent thought that it is morally wrong to clone humans. The reasons were based on religious grounds. They felt that God with His begettal process, has the right or the responsibility to create human life. The respondents thought cloning would be against God's will. It is like diminishing the role of the Supreme Being. Other oppositions are that individuality would be lost if humans were cloned. The human race would have a confused heritage. Still others say cloning can be used for sinister or destructive purposes. It is almost as if reality has become science fiction. But some say they favor implants, as its application may be useful for those with faulty or diseased body parts.

Social scientists say that sexual intercourse in marriage is important for four reasons: 1) to give motive and incentive for men and women to join together for love in marriage; 2) to become the process for the conceptualization of a human being; 3) to create a family unit in which babies are raised and guided to maturity; and 4) to enhance responsibility for the economic and social welfare of all members of the family. If genetic engineers applied their genetic manipulation to a donor's DNA complement taken from the nucleus of a person's cell and fused it with an unfertilized enucleated egg and reinserted it into an ailing patient, a cure is nearly possible. It would provide new cells closed from the donor, but clearly all weaknesses, diseases or inherited faults can be replaced. This would produce the same person with improved, functioning body parts.

Here again is the Biblical concept of doing good to humanity. (1 Pet 5:10) Only this time, it is science that is moving in this direction, but it is God using the agency of science.

## CHAPTER 2

# *Genetic Engineering*

*“But when that which is perfect is come, then that which is in part shall be done away.” 1 Cor 13:10*

THE INTRODUCTION OF NEW genetic engineering tools is opening up a life-improvement industry of global proportions. The industry gets close to enhancing nature within its limits, but backs off when it encounters these limits. The industry still needs a compass as it proceeds to move ahead on a worldwide scale. The compass that will give direction to the industry is found when we examine the goals that God gave to humans. They are found in Genesis 1:26-27. The goals are described more fully in Chapter 5 of this book. The term genetic engineering refers to the process by which scientists alter or add specific genes to genetic materials present in the embryo so that an individual could attain characteristics that she or he would not have had otherwise. Cloning in and of itself is not genetic engineering. Much more scientific work still needs to be done. The success rate of cloning is 50% at best with animals. Genetic engineers intend to enhance and better the normal functions of plants, animals and humans. At the beginning of the new millennium, 60% to 70% of the foods on American grocery shelves was genetically engineered to some extent and now more than 40% of U.S. farmland are planted with genetically engineered seeds. Here are the benefits of genetically engineered products.

### BENEFITS OF GENETICALLY ENGINEERED PRODUCTS

1. Improvement of life and life/death issues for the betterment of humanity.
2. Tissue development for parts replacement, such as kidneys, bladders, etc.
3. Genetically derived therapies for the prevention and cure of cancer, heart disease, AIDS and a host of other illnesses.
4. Genetically altered genes to improve the ability of the

- immune system to fight infection or treat problems of illness, obesity, aging and longevity.
5. Repair and replacement of tissue for a failed or poorly working brain section.
  6. Ability to clone or duplicate vegetables, plants and animals for organ transplants to humans.
  7. Ability to remove weak and faulty organs that have a propensity to render disadvantages and handicaps to humans.
  8. Development of inexpensive, genetically adjusted vegetables that contain vaccines, vitamins and solely much nutriment for global consumption. These vegetables would be able to be grown in any household.
  9. Accelerate the genetically grown trees for oxygen production and carbon dioxide consumption, instead of waiting 50-100 years for normal tree growth. Genetically altered trees can reach maturity within a few years.
  10. Creation of super-crops with built-in vitamins and other nutriment. They would feed an escalating population as well as a resurrected population. Super-crops would be the “new pharmacy” for substitution of drugs, prescriptions and vaccinations.
  11. Elimination of food spoilage by substituting superior genes for inferior ones so that food would be able to withstand actions of bacteria. This improves shelf life.
  12. Genetic adjustments of plants producing fruits and vegetables in order to boost resistance to pests, thus reducing the need for pesticides.
  13. Genetic development of a natural plant as a substitute for new materials, plastics, fibers, oil and even other minerals such as iron, copper, etc.
  14. Genetic engineering of materials that can capture and store the energy of the sun in cold weather and repel its heat in hot weather. Energy costs and pollution associated with heating and cooling will then be reduced.

There are some disadvantages and drawbacks to genetic engineering:

1. Unknown negative effects on long-term health.
2. New allergies will develop and could run rampant.
3. May interfere with healing abilities of the body.
4. May reduce nutrient content of foods.

God is allowing genetic alterations to handle serious problems with his fallen creation. It may seem science is going too far, but God is still in control. Genetic manipulation has the potential to solve serious problems such as heart disease, schizophrenia, cancer, paralysis, diabetes, memory disorders, depression, deficiency of immune function, Alzheimer's, aging and hundreds of other health problems. Altering height, skin color, eyelids, and baldness may not be worth the effort. Then, should nothing be done to interfere with humanity in all its glorious variety? Human nature is valuable and should not be changed even if it could be done. Change is desirable in solving serious problems. There is, however, a limit. That limit is perpetuating God's original design. God's design is far superior to anyone else's. Also, science cannot and should not disrupt the delicate balance found in nature within and among the species. Science should and must enhance God's creation, but not change it to something objectionable. More specifically, humans are God's special creation. Nothing should be done to interfere with God's goal for humans. Animals may be used experimentally, to gain insights on how to apply new approaches to humans.

#### DEMAND FOR TRANSPLANTS IS HIGH

Generally, one in every 2000 babies born has a serious health disorder. Parents are looking to science for help to correct these disorders with organ transplants. Breakthroughs in transplant surgery research are now happening using pig parts. Pigs that are genetically altered have become potential donors for humans. Many humans have already received pig transplants, while many more are waiting. These pig organ transplants have given people hope for replacement of their failing organs and extending their lives. Transplanting genetically modified hearts and other organs from pigs to people could be



possible in five to seven years. Researchers are altering pig genes to humanize their organs, making them more transplantable. This also would make pig parts compatible with the human immune defenses. There are, of course, many problems yet to be solved.

The traditional way to receive good transplants is to buy or receive from patients who have very little hope of survival, such as sufferers of fatal strokes, sufferers of heart attacks, traffic accident victims, and homicides. The cost of buying a traditional organ transplant can run as high as \$15,000 for kidneys. This is a bargain given the alternative is a lifetime of dialysis.

Another option, which does not include parts from another human body, is growing or culturing replacement tissues in laboratories. This is called tissue engineering. The strategy is to start with a small amount of tissue cells from another human. The tissue cells are replaced in laboratory uses and allowed to grow and divide. Then, the expanded tissues are used as building materials for skin and cartilage.

Still another application of re-fabricating organ parts has resulted in artificial livers. Scientists use polymer sponges with deep channels, which are seeded with different types of tissues. The result is an artificial liver, which is transplanted into humans to replace defective livers. Tissue engineers predict that the production of kidneys, hearts, as well as livers, is possible for those who need them without the problem of immune system rejection. These and other transplant strategies are under intense development. They are just starting to bear fruit. This technique will circumvent the huge problem with the transplantation of animal parts. The human body attacks the implanted parts so violently that the donor parts turn black almost immediately. This is called hyper-acute rejection, a defense mechanism in the body's immune system, which fights foreign invaders.

Genetic engineers can give new organs to a person under sentence of death. The replacement organs can turn the death sentence into a full and healthy life. However, the supply of replacement parts lags far behind the demand. Nearly 100,000 patients in the U.S. alone are standing by for a variety of new organs. More than 6000 patients die each year before their turn comes. Pig organs are desir-

able because they most closely resemble human organs in size and shape. Also, the parts are currently being genetically altered to carry human genes so that their organs would not be so readily rejected when transplanted to a human. New organ rejection is a huge problem in transplantation. Pig organs can readily be received for those who need them. Examples are pig heart valves, kidneys, livers and bone marrow.

Poultry growers are using a procedure, which injects stem cells to grow meatier chickens. Prolific egg layers are usually skinny. Chicken producers would love to increase production of meatier chickens by minimizing the skinny genes. The primary goal is to create identical copies of egg layers with desirable traits that can roll off the assembly lines by the billions. Another result of this procedure would allow all the disease resistant chickens to grow and eat at the same rate. Genetic engineers are reaching for this goal. The process is called metacloning.

Genetic engineering has the potential to solve world hunger. By 2050 AD, the world will need nearly three times the farm output of today. This output will provide high quality diets for a peak population of ten billion people, not to mention their animal pets. At this writing, one third of the world land area is now being farmed. Using high yielding seeds, fertilizers and pest protection. Eventually, as the population grows, farmable land will diminish significantly. Genetic engineers are working to meet this challenge of world hunger through genetic productivity of existing farmland to increase food supply.

Tree growers find it difficult and tricky to grow seedlings from natural tree tissue cultures. Genetic engineers are moving ahead in the development of high tech plantations where the trees are all cloned and engineered to carry new genes for pest and disease resistance. These kinds of plantations will render timber and pulp in enormous quantities. The trees can help in a great way to purify the air by removing the carbon dioxide and releasing oxygen. It is sobering to think how much we need trees. Trees are the major way to purify the air. If these plantations are setup throughout the world, a world supply of timber and pulp as well as enormous amounts of fresh oxygen will be available. At a time when rain forests are being cut down

and the purity of the air is being affected, genetic engineering and cloning of trees has an enormous benefit for mankind.

Genetic engineering can alter tobacco plants and make them nearly free of nicotine. New cigarettes to be introduced in 2002 will be manufactured genetically using altered, low in nicotine tobacco. Nicotine is the substance that gets smokers hooked. Furthermore, the genetic adjustment will allow growth of the plant in wider and less demanding soil regions of the United States. Those who smoked the test cigarettes say they are similar to ordinary cigarettes. They are a light smoke with very little nicotine. Government approval would make tobacco one of the first biotech crops to be used by consumers for health improvement. This information is cited here not to encourage smoking, but to note that use of these cigarettes may reduce lung cancer cases for those who are addicted.

#### CLONING OF PETS MOVING AHEAD

The first cloned cat arrived two months ago. CC, abbreviated for Copy Cat, is not a perfect match of its donor. See Figure 9. The cat was cloned by Mark Westhusin from Texas A&M University. It took 87 embryos and eight surrogate mothers to get one successful birth. It was hardly a resurrection because CC is not an exact duplicate of its mother. CC is more a shadow of its donor rather than a copycat. The genes are the same, but CC's markings differ substantially from its mother. CC's behavior and personality are also substantially different. This personality difference is significant since pet owners who have lost their pets want their cloned pet to be exactly like its donor.

The demand for cloned pets is high, which generates a lucrative money market. Clone banking organizations are emerging, which collect and store a pet's DNA. If and when the pet dies, biotech companies are available to clone the demised. Hundreds of people have already paid as much as \$1000 to freeze their pet's DNA with the hope that pet cloning procedures will someday be affordable, safe and yield a true reproduction of their lost pet.

Biotechnology is forecasting a market of as many as 2 million people a year who might want to clone a pet. Interesting to note, millions of stray cats get killed each year for lack of homes. These stray

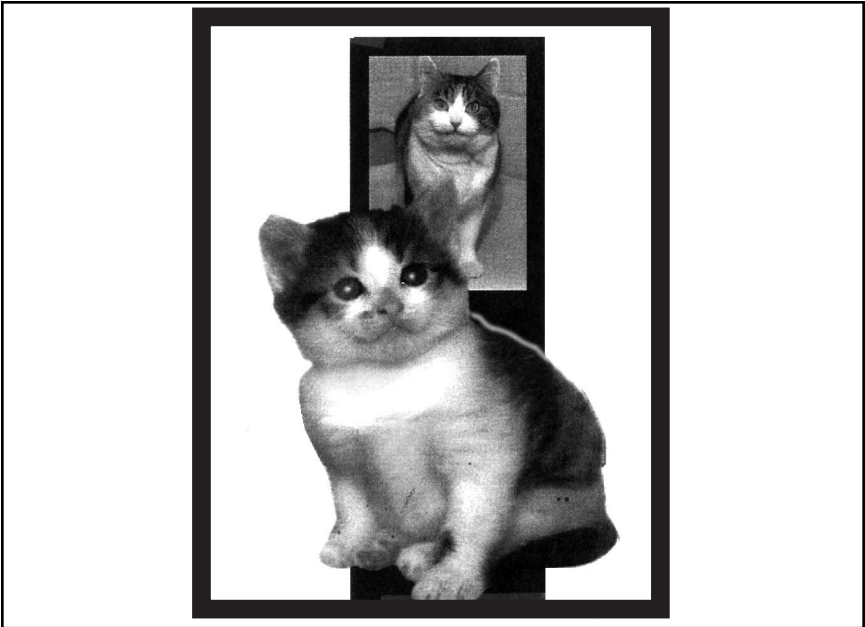


Figure 9 - Cloned cat with the mother cat donor

cats have unique personalities and would give a pet lover as much satisfaction as a previous one. Westhusin is now trying to clone dogs as well as cats. The cloning of pets may be nothing more than toys for humans. The animal cloning procedure may be a dress rehearsal for what scientists could expect if a human clone is attempted. Westhusin feels CC is significant as a milestone in research, but feels the time is not right for the business of pet cloning. In fact, he says you will not get back an exact copy of your pet. Companies that make this claim are bordering on deception. The companies that store pet DNA charge as much as \$800 to \$1200 for the storage. The cost of cloning is beyond that.

Cloning and genetic engineering are conceptually linked because they are functionally linked. Genetic engineering seems to raise much bigger issues than cloning since cloning duplicates what already exists, while genetic engineering intends to change the nature of problematic humans. Changing the nature of a human might mean making adjustments to an individual's genetic package limiting his design. It might also be found that genetic engineering has much more potential than DNA cloning. Right now the most important use

of genetic engineering is its application to human beings where damaged tissue or faulty organs might be removed, genetically engineered and then returned to the body.

#### SECOND GENESIS OF LIFE HAS STARTED

The second genesis in the control and improvement of life has started. See Figure 10. The biological sciences are making health improvements for humans at an ever-accelerating rate. Transplanting organs has now become commonplace. People have transplanted hearts, kidneys and other organs. This transplantation process is freeing man from the limitations of a degenerating body. Vitamins for almost every conceivable ailment are available. They are even available for preventing the ailment. As the secrets of life continue to unfold, memory, its improvement and enlargement of capacity are being boosted. Congenital defects and other forms of mental incapacity may be prevented by prenatal treatments.

What has been started is the second genesis long promised by God. (1 Tim 2:5-6; 1 Jn 2:25; Rev 2:10; 1 Cor 15:22) Today, there are many signs of this genesis. The heart and control of this genesis will be the resurrection of humankind. Meanwhile, much is being done to prepare for this miraculous entry. The synthesis of life is within everyone's reach. There are many views of this synthesis. Some are concerned science is going too far. Some are encouraging the research to see what gain can be reached.

#### REPRODUCTIVE TECHNOLOGY TO BENEFIT HUMANS!

In the United States, there are at least 25 million couples that are considered infertile. On a worldwide basis, it may reach 100 million. A couple is considered infertile when they have tried for more than a year to have a child, but have not been able to conceive. The infertility can be the result of many reasons. See Figure 11. Also included in this figure are methods followed for creating the ability to have a child.

Explanations for inability to conceive a child and ways to help circumvent the inability are as follows:

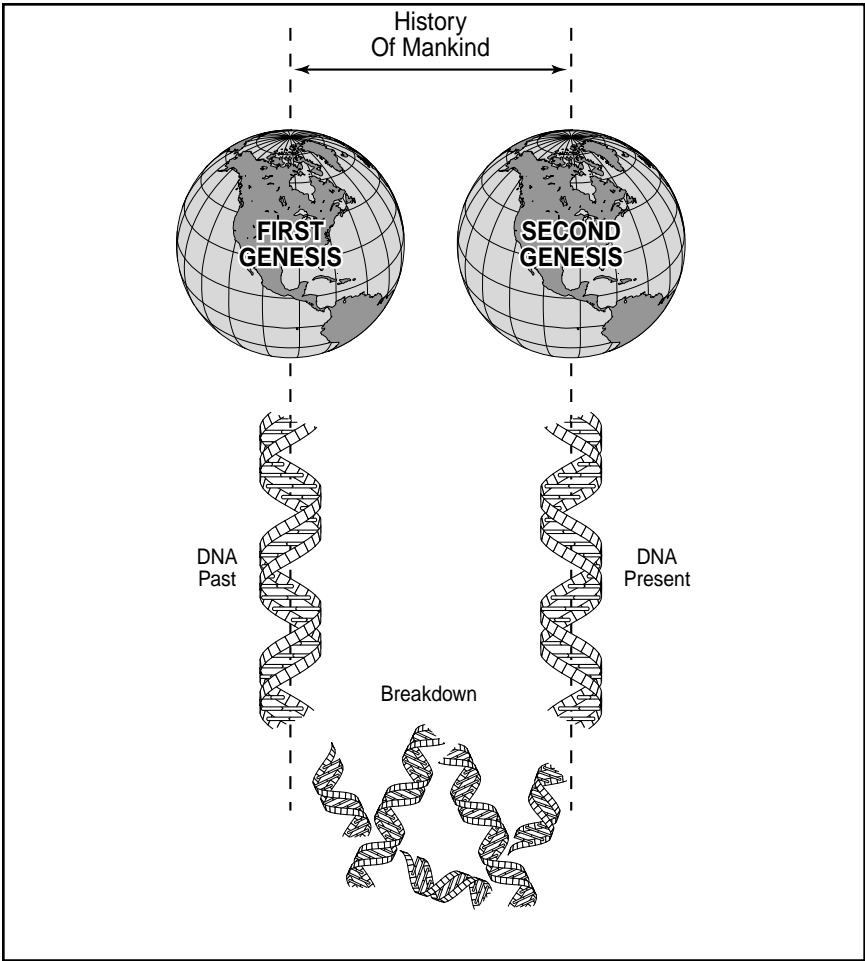


Figure 10 - Second Genesis of Life Improvement Has Started

a. Why there is inability to conceive:

1. Women cannot produce enough eggs. Lifetime production is approximately 400 eggs per woman.
2. Men cannot produce enough sperm due to genetics, faulty organs or environment. Lifetime production is about 400 billion, with millions in each ejaculation.
3. Blockages or defects in the reproductive tract of either the woman or the man.
4. Eggs or sperm have defective or diseased genes.

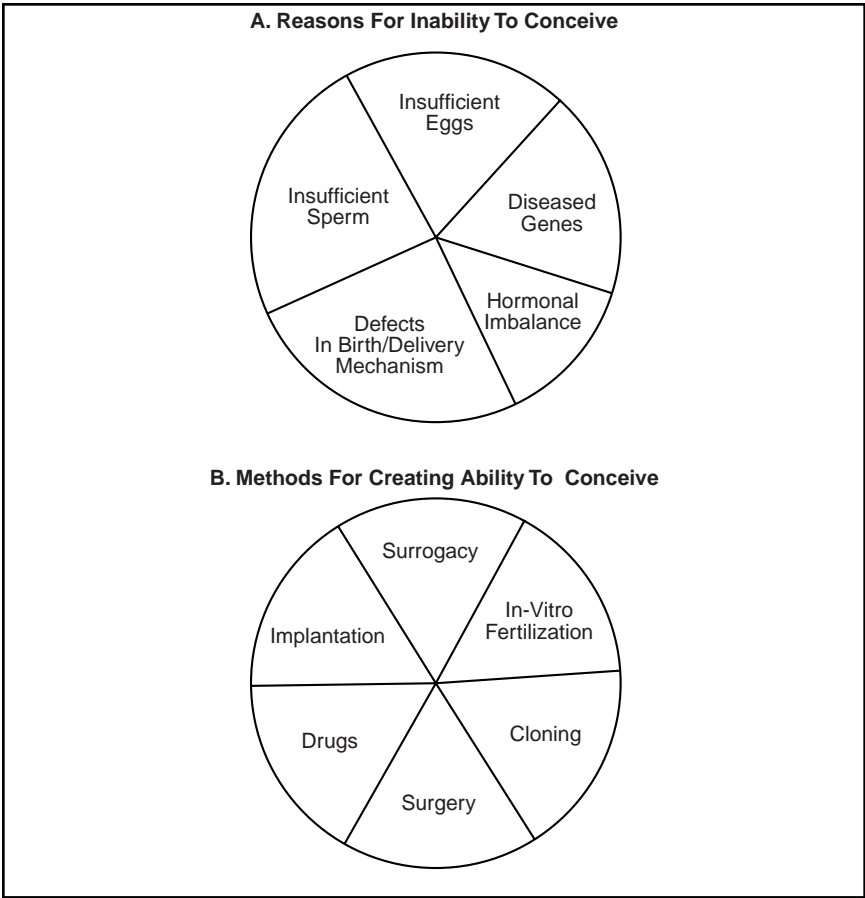


Figure 11 - Reproductive Technology Applied to Child Bearing

5. Hormonal imbalance in either the woman or the man.
  - b. Methods for developing ability to conceive:
    1. Surrogacy. Woman is “rented” to bear embryo.
    2. In-vitro fertilization. Fertilizing eggs with sperm in a dish or test tube and then insert them into the womb.
    3. Cloning. Clone one partner, and then put embryo in uterus.
    4. Surgery. Clean and clear fallopian tubes for insertion of egg and/or sperm.
    5. Drugs. Use of fertility drugs to stimulate ovaries to produce more eggs per cycle.

6. Implantation. Egg or sperm donation implanted in rented womb.

Reproduction technology, in spite of opposition, has given hope and health to couples that want to have children. It is even possible for an individual to “have” a baby by purchasing eggs and sperm from willing donors and hiring, for a price, “birth mothers” to do the rest. Many couples have done this. Reasons couples give are cosmetic, career aspirations, or threat of death to a carrying mother. Individuals don’t need to be in love with a partner or be married or engage in sex. Money is the only qualifier. It seems gays and lesbians are the greatest procurers of babies with reproductive technologies. The serious problems that occur in these procedures are multiple conceptions. Doctors cannot be certain that a single embryo, once implanted, will develop. Therefore, they implant several embryos at once to increase a woman’s chance of becoming pregnant. The chief risk of several implantations is they may all develop creating a multiple pregnancy. Three embryos are the maximum number recommended for those under age 35. The number decreases as the age increases. The cost of an in-vitro fertilization implant runs from \$8,000 to \$12,000. Older women beyond the age of 50 and 60 see the IVF procedure as a chance for them to have a child even after child-bearing age. As many as 100 older women have used this procedure. The success of giving infertile couples a chance for a family is seen with the growth of fertility clinics. Since 1980 in the U.S., the number of fertility clinics have grown from 30 to more than 300. The multi-billion dollar fertility industry has created tens of thousands of babies. It has also created a world where a dead man can impregnate a strange woman who has been rented for this purpose. This is where a child can have five parents and still end up an orphan. This is all done without sexual intercourse! This reproductive process has changed the traditional concept of the miracle of birth.

The Scriptures record Sarah, wife of Abraham, as unable to have any children. (Gen 11:30) God’s promise was that she would bear a son. This was given to her at the age of 90. (Gen 17:17) This is well beyond the age of child bearing. She laughed when she heard God’s promise. (Gen 18:13) Her approach was to utilize Hagar as a rented womb to have a child with her husband’s sperm. Ishmael was the



result of that reproductive process. (Gen 16:1-16) But God arranged miraculously for Sarah directly and individually to be pregnant with help from no one. Now science and technology have procedures and methods that can almost do what God did with Sarah. This view has again, raised the age-old question - has science replaced God? With all the reproductive technology, babies can be thought of as a product, something that can be mass-produced like other consumer goods. The Bible speaks of babies as being “begotten” and reproductive technology speaks of them being “produced.” The comparison is between “begats” and “production.”

## CHAPTER 3

# *Science Getting Closer To God*

*“Thou art near, O Lord; and all thy commandments are truth.”  
Psm 119:151*

SCIENTIFIC ACTIVITY IS INTENDED to mean one of four things, or a mixture of the four: 1) A “special method” to find things out. For example, is the discovering of the particulars and vastness of the universe. It is learning about the environment. It is the ability needed to answer the questions of what is, why, where and how. 2) It can include a “body of knowledge” arising from the things discovered. When gravity was discovered, it formed the foundation of the flight industry. Basic ideas promote other ideas. 3) It can mean accomplishments, which can be done when something is discovered. The “doing” is the practical product that can be invented or developed to be useful for humankind. This third point is often called technology. The popular description of scientific activity includes the activity of technology. 4) It can also mean an “objective decision-making” activity in controversial phenomena and wonders. This employs such techniques as experimentation, testing and measurements to establish facts, reality and truth. Here are some of the things science can do. First, science can forewarn mankind of certain events and thus enable us to avoid their most serious consequences. If rain is predicted, we can carry an umbrella. Ships are warned to avoid the path of a hurricane. Second, science can relieve us of a world of fear, rages and other disparages of energy. Science can heat and control the environment with merely the push of a button. Third, science can help in medical therapies to better the condition and quality of life.

Religious activity is a parallel to science. It could mean one of four things or a combination of the four: 1) It can mean a “special method” of finding things out about God, the spiritual world and the creation of all things. 2) It can mean a “body of knowledge” arising from the things discovered. When we establish the existence of God, the knowledge forms the basis of a relationship with Him. 3) It can mean accomplishments one can do when something is discovered or

revealed. 4) It can mean the “validation of scientific research” and its compatibility with spiritual matters. The “doing” is the practical result of God’s expectation of humans such as loving one another, sharing and encouraging one another and helping others with their problems of reconciliation. This last point is often called “spirituality.” Religious activities do parallel with scientific activities. Each attempts to further the discoveries of the knowledge it has already accumulated, while changing the errors it has accumulated over time.

#### SCIENCE AND RELIGION: TWO GREAT SYSTEMS OF THOUGHT

The idea that the Bible and science are at odds with each other is ill conceived and mistakenly applied. Science and religion have an important relationship with each other. They need each other. Science and religion are both thriving. One is not replacing the other. They have similar methods and similar goals. They are both great systems of thought. Science and religion have battled over the many centuries with regard to explanations on the origin of the universe and humankind. See Figure 12. Resolutions are emerging.

These battles existed because religion was intolerant. It also made unreasonable interpretations of the Bible. There were battles because science, so called was really unproven scientific theory and unsubstantiated. These unproven theories were in conflict with unreasonable scriptural interpretation. Both were wrong. Most of these battles were during the Medieval Ages or Dark Ages. It was the intolerance and erroneous conjecture of those ages, which caused them to be known as “dark.” When sufficient data are gathered to make theories a fact and interpretations of religious groups become reasonable with biblical perspectives, the battles dissolve. Then there are no conflicts between science and the Bible. There is only conflict between conjectural scientific thought and illogical Biblical explanations. Besides there can never be conflict between the Bible and science for the author of the Bible is also the author of the scientific principles, which govern everything from the universe to the atom and from the snowflake to the quasar. When the conflicts are removed, science and the Bible are harmonious. After all, science and the Bible are two great services for God, one for the environment

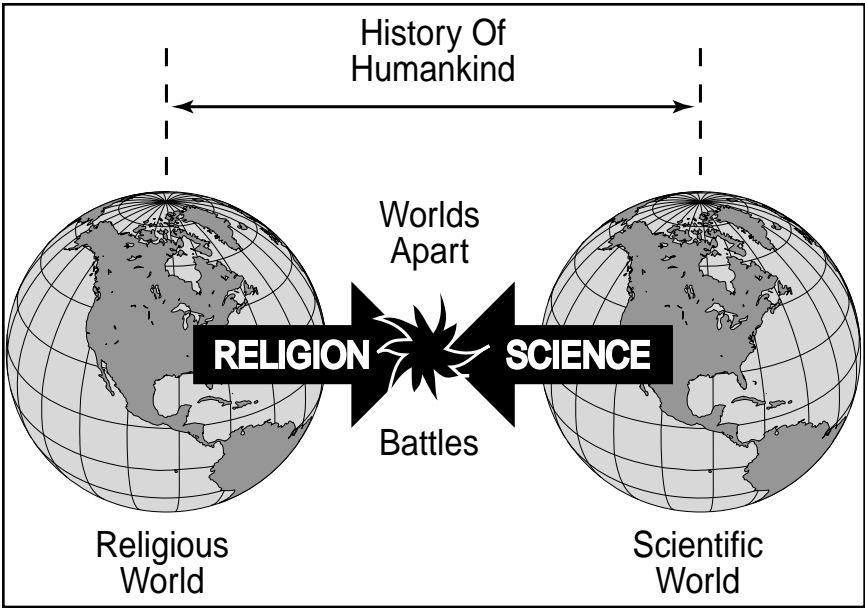


Figure 12 - Unholy War Between Religion and Science in Humankind's History

and the other for spiritual development. Science investigates, while religion interprets. Science gives humans knowledge for needed power. Religion gives humans wisdom to control that power. Science deals mainly with facts. Religion deals mainly with values. Science wants to accumulate facts, religion wants to tie these facts into a chain of truths. The two are not rivals! They are complementary! Seventeenth century astronomer and physicist Galileo saw the harmony between the two when he said, "Scriptures cannot err, but are often misunderstood." In a sense, he was saying that science could accuse religion of being rich in principles, but poor in facts. Conversely, religion could indict science in the same historical period of being rich in facts, but poor in principles. When these two systems of thought are brought together, humankind will be both rich in facts and principles.

Convergence, between these two systems of thought, has come closer over the years. This is understood by Stephan Hawking's recent statement, "If we discover a complete Theory of Everything (TOE), we shall all, scientists and ordinary people, be able to take part in the discussion of why it is that we and the universe exist. If

we find the answer to that, we would truly know the mind of God.” Scientific thought and Biblical interpretation must stop being adversaries! They both have the same mission of clarifying and understanding the surrounding mysteries. They both stumble and make mistakes. They both can learn from one another by supplying what the other is lacking. Science cannot ignore questions of value, and religion cannot ignore questions of fact. Science can remove ignorance and superstition from religion. Religion can give character and spirituality to science. Good science and good theology go hand-in-hand.

Scientists’ pursuit of facts is and continues to be an enormous contribution to the knowledge of life and its environment. But, all facts have not been identified. The search continues. There are still many unknowns especially in the spiritual realm. Probably the most important facts are still to be discovered. Additionally, supposed facts established in the past have often been changed, i.e., they were not facts to begin with.

#### THERE IS RELIGION INDIRECTLY IN SCIENCE; THERE IS SCIENCE INDIRECTLY IN RELIGION

Science has been perceived as being important enough to say it is the “new god.” However, Arnold Toynbee expresses the view that only a renaissance of religion can save our civilization from further decline. The Toynbee view is held by many thoughtful people. The advancement of science with its extraordinary achievements is often blamed for a loss of religious faith. There may be some truth in that. A study by 64 major reputable scientists referred to in Anne Roe’s book, *The Making of a Scientist*, reveals that most scientists claim to be agnostics. However, they also admit they had a religious upbringing. This upbringing influenced their attitudes, causing them to question their skills and degree of freethinking. The findings reveal this early influence had an effect on the making of scientists. Of the 64 studied, the backgrounds were as follows: 6 from Jewish families, 58 from Protestant families and none from Catholic families. The most productive way to gain, discover, interpret and apply knowledge is limited by one’s capacity to ask meaningful questions, to observe objectively and to reach conclusions based on information gathered

pertinent to the questions asked. Religion encourages people to raise questions and connect responses relevant to the questions. In this manner religion is indirectly science through their connection with people.

There are several ways to know something; religion and science are both involved in these ways. See Figure 13.

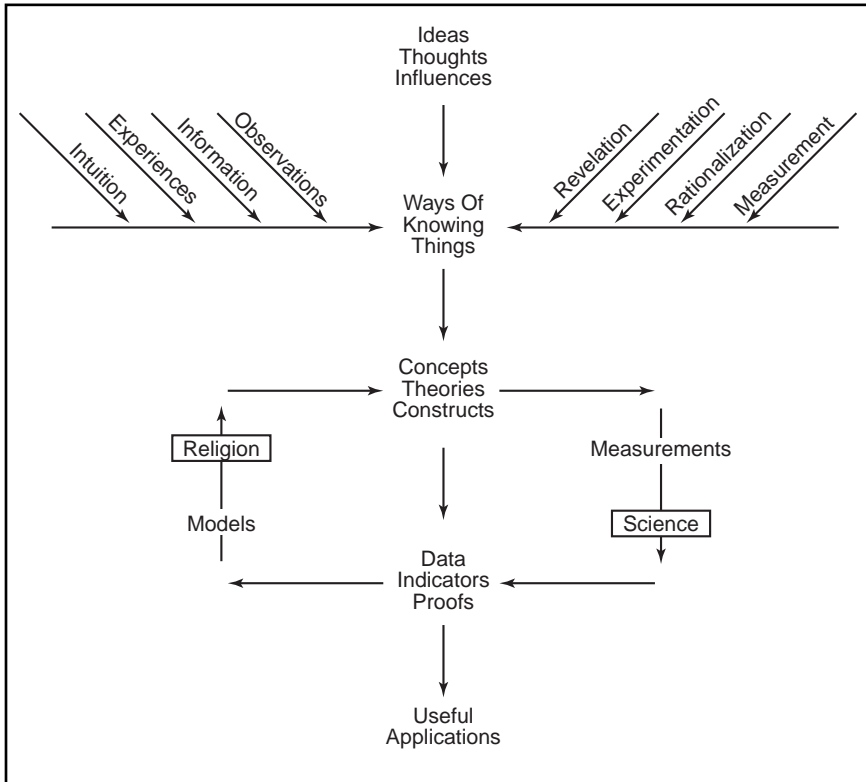


Figure 13 - Model of the Process of Knowing Things Used to Illustrate Applications for Both Science and Religion

One can see there are parallels between the methods of science and those of religion, however, there are also differences. Science is a method of discovery. But discovery is exposing and uncovering something, which already exists. Since creation is the formation of an idea without a pre-existence, discovery and creation go hand-in-hand. Without pre-existence creation needs God’s ability to make something from nothing. Discovery needs science to unfold and

unravel what was created. Variation as a form of creation is weak when it relates to what God did and still does. Many scientists are including God in their conversations. For example, Albert Einstein, “I want to know what were the alternatives that God faced before He settled on the one we have.” Stephen Hawking, “God fits the pages of my book.” Steven Weisberg, “But no one was there to see God do it.” Wilson Turner admitted, “Evidence of the beginning of the universe is like looking at what God did.”

If religion is a hidden reality behind scientists and us, why have we taken so long to recognize the powerful influence religion has had on science as well as the influence science has had on religion. Can we make the assumption that improving religion during the upbringing training of potential scientists can improve the quality performance of these scientists? There should be more effort to integrate science and religion. The goal of science is to help and improve man. Religion wants to do the same. They are compatible goals. Science deals with the present reality. Religion deals with a future reality. In part, the historical religious reformation succeeded in breaking the shackles of the past constraints. Why can't there be a scientific reformation, which would break the shackles of the past and more fully integrate science with religion? Such a reformation would dispel the notion that science is replacing God. It would also help people to recognize that science and religion “both” serve God! They can help one another to face infinite immensity, infinite minuteness and infinite complexity associated with the physical and the spiritual realms. Here are ways that science and religion can be better integrated.

a. Acquisition of truth comes with continual verification of what is believed. As knowledge is acquired, the sciences grow and change. Scientists do not know the ultimate reality. Neither do those who have personalized their religion. Dogma and creeds need not be frozen for all time. Both scientists and theologians need to be encouraged to consistently and critically review and analyze their beliefs in order to advance knowledge.

b. Confusion analysis is the start toward truth. This means having a humble frame of mind, which allows admission of a mistake or lack of knowledge. A cover-up of ignorance or a mistake is indeed a

retrogression of truth.

c. God created, science discovers. Science confirms man did not make himself, but is a creature of a greater power. Religion gives light on the nature of God. Science gives light on how, when and where God created.

d. Everything varies within one system. Science sees fixed laws that rule the cosmos from end to end in a single system, although there are variants. Religion sees the same single system, but must accept the variants.

e. God and discovery. Science and religion cannot conceive of themselves as local agents of a narrow slice of creation. Both are privileged to know more of God's design and the cosmos. Mathematics for example, is not a human invention. The entire edifice of science is built on mathematics. Mathematics is God's invention! It is intrinsically constructed into the nature of things.

f. God's love and science's love are compatible. God's love relationship with His creation far greater than the scientist's love of mankind.

g. Science to some is true spirituality. Religion should apply to both God and man. Science serves man, but must also serve God in a more direct way.

h. Faith common to science and religion. When religion is stripped of crude mythologies and fixed dogmas, and when science admits that much of its "facts" were actually based on questionable assumptions, what will remain will be a common faith, moving toward the unseen, the unknown with puzzling complexities.

Science has done much to help human health, but it cannot save mankind! Science can forewarn humans of impending events. It can help to avoid serious consequences. It can predict when a storm is approaching or what to do when a disease has affected humans. Science can relieve mankind of many rages and other unpleasant dissipation of energy. It can assist humans in hundreds of ways with famines, epidemics, communications, transportation, food therapy, sickness and the accelerating aging process. It can give mankind more light, more heat, more rest, more sight, more hearing, more taste



and more speed. Science has done this and will continue to do more of this in the years ahead. But can it save mankind?

Of course, one must ask, save mankind from “what?” The answer is humankind’s most fundamental problem - the number one problem. All else is secondary or trivial to this number one problem. It is this: Humans are on an involuntary track of dying. Humans will die and they have no choice. Close to this problem is, when we die, where are we going? Man’s fundamental problem deals with the issue of life and death. Here is where God comes in solidly. God has the answers! There are no alternatives. God offers eternal life, but only to those who are willing to conform to His principles of living.

Our uncertainty and fear of death keeps us religious since God is the only one who offers a solution to man’s fundamental problem of aging and death. He and He alone can change the hearts of men. This is affirmative. Acts 2:17, “...I will pour out of my spirit upon all flesh...” He also will stop all adversaries who will interfere. Science cannot help us here in spite of its efforts with refabrication, gene therapy or cryogenics. Only God can help us. Our intense love of life and its continuity will keep religion and God in our hearts and in our goals of life. This predisposition to religious faith, as complex as it is, is a powerful force in the lives of people. It gives us the reverence for the sacred and sustained drive to find truth and ultimate meaning. Science is doing a good job of explaining and helping the parts, but somehow falls short when reaching for the meaning of the whole. It can break down the components of one’s body, but cannot stop the triggering, tower of aging and death.

Because religion and science live side by side with some mutual goals, they have to adjust to one another and even cooperate. For science, it means moving over a bit and acknowledging the role religion occupies in connection with reality and its interpretations. If science tells how, religion must explain why. Interesting to note, higher learning institutions such as the Carnegie Mellon University and the Massachusetts Institute of Technology are offering Bible studies and minor degrees in religion. “God and Computers” and “Minds, Machine and Metaphysics” are some of the courses offered.

Can science save us? No! But it can help a great deal in improv-

ing the state and condition of the human plight. We have discovered that science is being used by God to effect changes needed to bring humanity to the conditions of enjoying His promises. Science and religion are working for God. In these days, we are in the beginning of a great second genesis that will not see a third genesis because humanity will be perfected. Science is great, but it will never replace God! The weaknesses of science in the areas of behavior, social relations and character development can be supplemented by religion through the spirit of God.

God is in the process of achieving extraordinary goals according to His timeline. He will use any agency, including science to accomplish His goals. See Figure 14. In the fourth goal especially, God expects humankind to develop an image and likeness of Himself. All

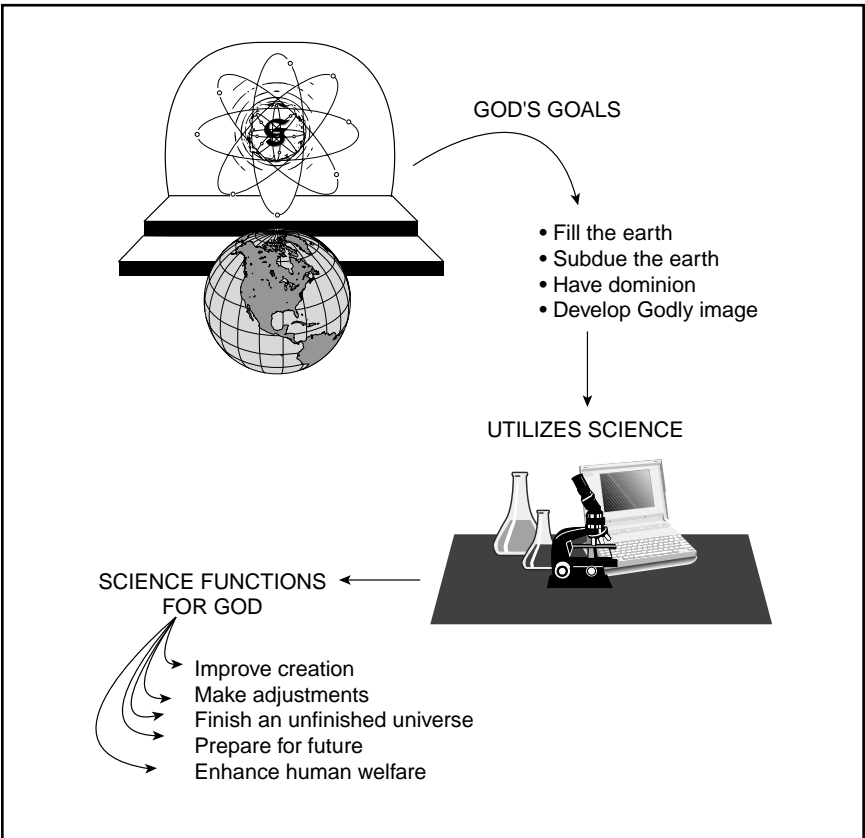


Figure 14 - God Utilizes Science to Complete His Goals

throughout history, God made adjustments to implement His plan. Adam was released from Eden to gain the experience of sin and evil. The flood was used to indicate to civilizations that deviations from moral law would only be allowed for a short time. God used Moses to deliver His people, but Moses was not allowed to enjoy the victory of being in the Promised Land. Israel gained valuable lessons from this experience. Glorious Israel was split after Solomon's reign in order to preserve a remnant to fulfill the Abrahamic promise. Nebuchadnezzar was brought to bear on Israel, which included the destruction of the temple. Daniel was exiled to Babylon to give prophetic promise of the coming of the King of Israel. This information and influence sent the Magi looking for the babe in a manger. Paul was redirected from persecuting Christians to directing them into a great Christian movement. God used science to save the world from the black plague in the Middle Ages by leading them to the concept of quarantine, a medical practice used in the Bible. The reformation was the method used by God to bring His people out of a rejected organization. Hitler was applied to the Jewish question of existence and unknown to him, he helped the Jews regather to restore the ancient state of Israel. When the progress of the new state of Israel was threatened, God utilized the Zionists and the new Israelis to win several wars.

In this same fashion, science and technology are being utilized to effect changes in preparation for the establishment of God's kingdom on earth. God made several appearances in the early history of time because there was no Bible. People were illiterate and that natural phenomenon was needed, since God was invisible. Today, the Bible in its entirety is available. Most people are literate and many seek to be spiritual. Faith has developed to a significant degree. When Jesus caused a lame man to walk, it was a miracle. When science installs a new hip or a knee, and a person walks, it is also a miracle. When Jesus opened the eyes of a blind man, it was a miracle. When science removes the cataracts of a person who cannot see, it is also a miracle. When Jesus brought back to life a man near death, it was a miracle. When science diagnoses and treats a man near death, such as one with kidney disease, and he recovers, this, too, is a miracle. The comparison is valid not because science has become God, but rather

because God has allowed and utilized science to develop such phenomenal skills and insights to do now what must be done for helping and continuing God's plan. God is necessary because He is behind it all. For years, farmers have been feeding antibiotics and steroids to cattle to make them grow faster, bigger and to provide better quality meat. When we buy a hamburger, we are buying what science has helped to produce. It is easy to lose sight of reality in these matters. The successes of science and technology do not in the slightest degree deny God. When one is sick and goes to the doctor for help, the door to God is not closed and opened for another deity. But rather the patient goes to a resource that the great and invisible God has set up to help mankind. If God were to involve Himself in the daily, natural activities of life, He would become a nature or physical God, rather than what He is - a spiritual God. Science has become a great and single gift of God. Science has become a means by which God in His infinite mercy upholds and preserves His creation. Science is also the means by which man even in his fallen state is mercifully permitted to make progress along various lines.

#### SCIENTISTS MAKE MISTAKES LIKE THEOLOGIANS!

If you were to pick up a book on astronomy published 100 years ago, you would be amazed at the faulty cosmic ideas found there. Copernicus was the first to establish that the earth and other planets went around the sun. However, Copernicus said they traversed in circular orbits. Copernicus was half-right, yet he made a mistake. It was Isaac Newton who later corrected Copernicus by discovering that orbits were ellipses. Newton later would describe the infinite static universe. He would say the universe had no start or beginning and the stars did not move. They were fixed points of light. See Figure 15.

Newton stated that the universe was held together by gravity. The components of the universe would have fixed distances between motionless stars. Einstein challenged this view and said it was faulty. He was a proponent of an infinite moving universe, which had no beginning. He believed it was held together by gravity, but it was moving. There were fixed distances between stars, which were moving toward some edge of the universe. But Einstein made mistakes as well. Einstein made two mistakes: 1) there was no beginning to the

static universe; 2) the distances between stars were fixed. If you were to pick up a current book on astronomy you would probably be reading Hubbell's Infinite Expanding Universe. In it you would find that the universe had a start, there was a beginning and the distances between stars are variable. Hubbell's view indicates a big bang caused a spherical explosion from a cosmic atom. The universe and the stars are expanding with variable distances as the expansion continues. See Figure 15.

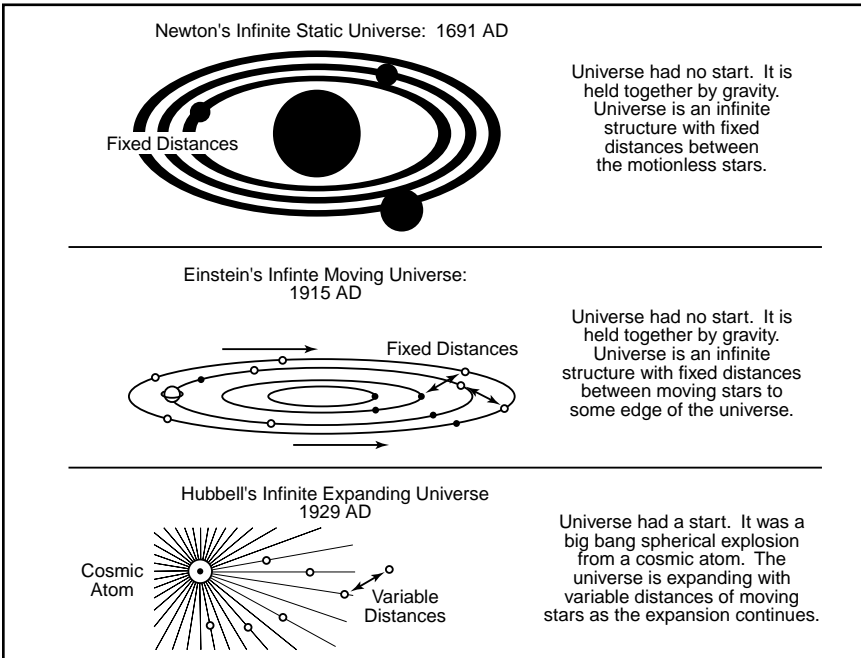


Figure 15 - Changes in Scientific Views Over the Years

Even with his enormous error about the cosmos, Time Magazine chose Albert Einstein as science's man of the century. The U.S. News and World Report of August 17, 1998 describes how Albert Einstein shook Hubbell's hand and acknowledged his mistake, which he called the worst mistake he had ever made. Einstein's humility was notable in admitting his error and apologizing for it. The belief in a static universe was so strong among astronomers that when Einstein postulated his theory of relativity, he fudged it in such a way to force it into a static universe. Most scientists accepted his relativity theory, but were amazed to hear Einstein's admission and apology to Hubbell. Hubbell and his sin-

gular big bang theory caused Einstein to change his mind. The big bang spherical explosion and expansion theory comes very close to the Biblical view, which states the universe had a beginning. Hubbell proved the Bible and said the universe had a beginning. For years, scientists have said the universe just existed with no beginning. The Bible for years was saying the universe had a beginning. It was God who caused this beginning. This shift of science from the static, immovable universe to a beginning, expanding universe with variable distances between the stars, represents the most significant change science could ever make toward the Biblical view. While a beginning universe does not confirm the existence of a beginner or starter, it surely does open the way to scientists for that possibility. Einstein, nevertheless, was well known for his equivalence of mass and energy.  $E=MC^2$  led the way for scientists to think about the fundamental properties of the universe. But recently, a new theory has challenged Einstein's declaration that nothing can go faster than the speed of light, which is 186,000 miles per second. The new theory states that energy itself can go at variable speeds. This was discussed earlier and is opening up the idea that a greater speed exists for angels, other spirit beings and God Himself in which they all can travel about the universe with amazing speeds beyond that of the speed of light.

## *Scientific Criticisms of Human Cloning*

*“Give therefore thy servant an understanding heart to judge thy people, that I may discern between good and bad...” 1 Kings 3:9*

CLONING IS THE DEVELOPMENT OF ORGANISMS, which have an identical set of genes. In making twins in animals, such as cattle, the embryo is divided one or more times, which allows the new clusters of cells to develop into genetically identical organisms. Scientists who execute this procedure say cloning human embryos should be just as easy. There are many reasons given by scientists as to why human cloning should proceed. These are listed in Chapter One. For example, if a child needs an organ transplant, the mother could give birth to a clone, the child’s identical twin, which would be a perfect match for organ donation. But this would mean killing the clone to save the child. Would it be considered an act of murder? It would be an act of murder if it were a begettal human. I’m not sure for a cloned human. If it is not, then a cloned human is not a legal human. If this procedure for organ transplants were allowed, perhaps hundreds of cloned humans would be killed to save each one’s twin. Furthermore, it would take time for a cloned child to develop and be ready for the organ transplant. Another reason, equally weak, is that parents could keep a frozen embryo as a back up so they could make an identical replacement in case their child died. This undermines completely God’s arrangement for a resurrection (to be explained in Chapter 5) of the demised individual. It is far better to return as an original human than return as a cloned twin. By this scientific approach one who dies would be lost forever. The Godly approach is to return the demised individual back to life with identity, memory and experiences. (Jn 5:28) But, make no mistake, science will proceed to clone animals for use in medical research. Some scientists will try human cloning. Experimenters need twins in comparative experiments, one for control and the other for application in seeking the medical cure

of a disease. Meanwhile, the U.S. Government has placed a ban on the procedure and process of human cloning. Scientists, nonetheless, are estimating a human clone will be produced within ten years.

Where will this lead? Are there some things that are better not known, or, if known, left alone? The technology for cloning a human now exists for doing it. But the fact that it is technically possible to do does not mean it ought to be done. Who has the responsibility to guide and control the technology and knowledge of the creation of a new life? Is it the scientists, the government, the churches, the masses of people or is it God Himself? My answer is God Himself. These questions are not new, as they have been considered many times in ancient philosophical thoughts, religious inquisitions and countless legalistic debates. Scientists feel they are standing on the threshold of a new age. The fruits of this technology are a breakthrough very much like nuclear energy. When dealing with nuclear energy, caution, prudence and responsibility are urgently and morally required and also encouraged. Scientists have been among the first to call for restraint in the field of research. They are not convinced that the benefits of cloning humans outweigh the risks and the serious problems that can emerge.

#### SERIOUS PROBLEMS WITH HUMAN CLONING

There are serious problems with cloning. Some are briefly described as follows:

1. If human cloning were successful, what would a clone look like?
  - a. Almost identical to the donor, but not exactly. Much younger in looks, but genetically it may or may not have the same age of the donor. These changes are due to the mutations from chemicals and radiation that the cell was subjected to. The clone's DNA would contain all the mutations that happened to the cell of the donor. The DNA mutations and the aging process are now being debated among scientists.
  - b. Behavior will be entirely different since the individuals are brought up at different times and shaped by different life experiences.



c. The brain, which relates to personal identity of the clone and its function of memory, will be entirely different than that of the donor. One cannot clone an existing brain and its contents.

d. Personality and level of intelligence will be different from the donor since chance factors of environment, diet, stress and experiences will be different.

e. Propensity for physical character traits and mannerisms will be the same since the genes are the same. Yet, environment and upbringing will change this propensity.

f. A cloned human will not be 100 percent identical with its donor.

2. Cloned individuals are expected to be somewhat at the same age of the donor. Even though they as babies, their age is the genetic age of the adult donor. This age may be as much as 30 to 50 years even though they are babies. They may look young, but will live only as long as the adult donor will live.

3. Cloned individuals may age faster as they have weaker immune systems. This is debatable! They may die earlier, 30%-50% may die immediately or shortly after birth. The immune system seldom has a chance to get started in the clones. The clones can develop severe anemia. The thymus gland, where the white cells mature, seldom seems to function or bring cells to maturity.

4. Cloned individuals move away from the variety of nature's individuality. Individuality has been God's design. No two humans are exactly alike. Even twins with identical features are different mentally and behaviorally.

5. Cloned individuals, who are expected to donate their parts to the real twins, may be donating a weak or rejected part. The immune systems are not identical.

6. Cloned individuals may not be identical in sexual performance and reproductive capability as in non-cloned humans. A mule, which is a crossbreed between a donkey and a horse, is not able to reproduce itself. There is a question whether a cloned human can reproduce. If reproduction is possible, the offspring probably will be weak. This means a second generation from cloned individuals will

become weaker still. In animal cloning, Dolly gave birth to six lambs, but Dolly is now experiencing severe arthritic problems!

7. Cloned individuals are the first generation. It is not known what the nature and quality will be of the second, or third or fourth generations. The disaster may be greater than the problem, which was originally intended to be solved.

8. Cloned individuals may not be considered members of a family unit especially if they are made for organ transplants. Sexual intercourse in marriage produces babies as a product of the love between a man and a woman. A family unit is developed in this way. When this process is bypassed, the family is diminished as well as the sexual nature of the partners. This is a serious matter! Remove the family concept and the basic design of living that God instituted is removed. (Gen 2:23-24) Cloning goes against everything that we know that is good, natural and decent about family relationships!

9. Cloning is very expensive. Greed for money is running rampant. A clone offer goes as high as \$3.5 million. Only the rich can afford that opportunity. God gives to all people, whether rich or poor, the opportunity to reproduce themselves through the natural processes.

10. Cloned individuals may develop severe side effects, such as new allergies that could become widespread. The negative effects of the allergies can be severe.

11. Cloned humans do not carry the content memories and experiences from the brain of the parent donor. The brain is the most complicated of human organs, and the most essential to the continuity of character and personality. The brain cannot be cloned or duplicated from a parent DNA. This means individuality of the donor cannot be cloned. Therefore, a cloned copy is a copy, but a poor copy indeed!

12. Cloned individuals are still in the experimental stage. At this writing, no human has been cloned of which we are aware. As in cloning of animals, there are grave risks of mishaps, deformities and immune difficulties. One can only imagine the number of experiments that will be needed to get a successful clone since the first attempts seldom are fully successful.

13. The clone would suffer in virtue of being a clone living in the shadow of its parent donor. There would be two types of humans on planet earth: cloned humans and begettal humans. Clones would feel less like individuals. They will know they were a means and not an end.

14. Cloned humans would know they are used for some selfish end. A begettal human, who needs a heart would proceed to kill his clone to have a needed part.

15. Cloned humans would be known as second-class citizens. They would not have a person's right to individuality, autonomy and selfhood. They would be discriminated against for more reasons than the minorities we see are now experiencing.

16. Cloned humans, according to Leon R. Kass, professor of social thought at the University of Chicago, he believes in the cloning process will bring about the practices of father-daughter incest, sex with animals, mutilating corpses, eating human flesh or even rape or murder. These practices, of course, are not actual, but relate to cell manipulation. He recommends an international ban on human cloning.

17. Cloned humans devalue humanity. There is no valid reason that would ever justify creating life for the sole purpose of destroying it. Once we cross this line we submit to the notion that some humans are less human than others. The value of humanity declines.

#### DELVING INTO LIFE'S MYSTERIES

Our bodies belong to God. We have them on loan during our lifetime. God is the owner! He can and does impose conditions on our use of our bodies. God wants us to preserve and sustain the health of our bodies as well as the bodies of others. Physicians, scientists, pharmacists and other agents in the medical field are partners with God in the processes of healing and the avoidance of pain. We have a compelling duty to God to develop and use therapies that can aid in taking care of our bodies. We are not God nor are we omniscient or omnipotent. Therefore we must be careful to ensure our actions do not harm ourselves or others. This is so unlike some scientists who want to kill life in order to save it. (Gen 3:5) Here are some scriptur-

al guidelines about health and life.

1. Health care is a communal responsibility whether in marriage, family or with neighbors. Love thy neighbor. (Luke 10:27)

2. The potential benefits of stem cell with therapeutic implants research are so enormous, at least in theory, that we have a duty to proceed with the research to make it happen. “That we may be fellow-helpers to the truth.” (3 Jn 8)

3. When a human being sees a disabled person, we are encouraged to help wherever we can. And when he saw him, he had compassion on him. (Luke 10:3) See the Good Samaritan.

4. Stem cell research under therapeutic implants is to be used for cure and health rather than profit and selfishness. Treasures of wickedness profit nothing. (Prov 10:2)

5. The benefits of stem cell research must be applied to the poor as well as the rich, the socially low as well as the socially high, etc. There should be no restrictions to the availability of the benefits from the standpoint of age, race, nationality, gender and class. Sell that thou hast, and give to the poor. (Matt 19:21)

Since the brain and its contents cannot be cloned, we surmise the spirituality of the donor cannot be cloned since it is part or within the brain. God gives His spirit to a begettal human, but can a clonee siphon off the spirit for himself? Would that make a donor a god, if he the donor, can share God’s spirit to a clonee? It does not seem likely God’s holy spirit has any transferability from begettal humans to clones. An argument can be made that a clonee can receive God’s Holy Spirit directly from God if the clonee followed the normal stages a begettal human does in receiving God’s Holy Spirit. But it is not likely. See Figure 16.

#### WHY GOD ALLOWS SCIENCE TO DELVE INTO LIFE’S MYSTERIES

God is allowing science as well as humanity to delve into life’s mysteries for lessons to be learned and diseases to be cured. One great lesson is the appreciation for God’s original design and plan for human living. The more we delve into variance, the more we like what we see. This may be a great lesson that science needs to learn!

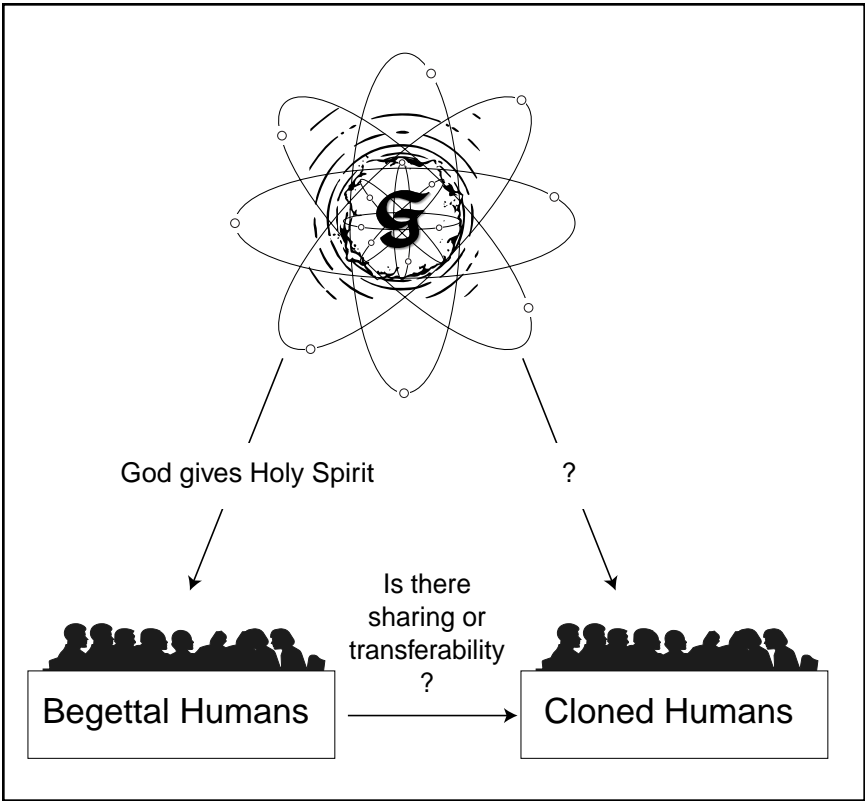


Figure 16 - Would God Give His Holy Spirit to Human Clones?

Science needs to help the condition of humans to return to its original condition instituted by God. The cloning of monkeys will enable scientists to conduct experiments on organ transplants. These experiments can then be tested on the monkeys rather than mice since a monkey's biology is closer to a human biology. Most medical therapies are now first tested on mice, but the use of monkeys will make tests more reliable for techniques with new organs and drugs. Monkeys could fill a scientific gap needed to help humans. Furthermore, cloned monkeys will eliminate the scientific need to capture wild monkeys from their natural habitat for experimentation. Cloning would prevent monkey extinction. Of course, extinction can be caused by many things.

As people tend to worship science, looking to it for all the answers, they will find themselves wanting. We may reach higher lev-

els of affluence, live longer and even healthier lives, but a kind of barrenness may develop in every soul. That barrenness is the loss of spirituality in individuals. The spirituality of clones has not been addressed by science at all. Isn't this important?

Science needs to discover what God designed and created from a spiritual point of view. No matter where we turn the scientific community and most practicing scientists claim human cloning is unethical in and of itself, and it is dangerous because of the consequences that may follow. Some scientists, a small minority, may secretly undertake to clone a human, but will lose the honor and distinction to stand up proudly to claim the credit for their technological achievement. Those who do this secretly and emerge publicly will encounter a public repugnance as well as possible legal ramifications that may even damage their names as well as their scientific position. There is a deep repugnancy and a mental transgression to trivialize the origin and development of life as God has set down for mankind. Scientists should accept prudent restraints in the context of research and improvements of human health and longevity. Genetic engineering seems to be the bright and rising star for this goal. The moratorium on human cloning should be continued.

## CHAPTER 5

# *God's Design of Begettal Humans*

*“And God said, Let us make man in our image, after our likeness...” Gen 1:26*

### GOD'S GOALS GIVEN TO HUMANS

THERE ARE FOUR MAJOR GOALS, which God introduced in the Garden of Eden, which have bridged all the historic stages over the centuries. These goals were introduced by God. The goals are in the process of being accomplished. (Genesis 1:26-27) Goals are visions and “where there is no vision the people perish.” (Proverbs 29:18) These goals are:

1. “Fill the Earth.” This is a commission given to Adam as well as his progeny. The population has grown over the years and the growth continues unabated. Currently the figure is over 6 billion and it will double by 2011 AD. The end is not in sight. There is a design limit to filling the earth. That figure is known only to earth's Designer.

2. “Subdue the Earth.” This is the commission to finish an unfinished earth. To make the earth a paradise in which all humans can live throughout eternity. Much has been accomplished toward this goal. There is more to be done. Ecological and conservation activities have been accelerated.

3. “Have a Dominion.” This commission puts humans in charge as overseers of the fish of the sea, the fowl of the air and every living thing that moves upon the earth. This means to actively care, maintain, produce and perpetuate the lives and species of these creatures in the dominion.

4. “Man to Be in the Image and Likeness of God.” The character and moral content and lifestyle of humans must reflect the image and likeness of God. For the past 60 to 70 centuries, the human race has been learning and experiencing this likeness. Much has been done. Much more needs to be done.

The Biblical Civilization as described in the book of Genesis,

Chapter 1, has incorporated these four major goals. The history and meaning to human experiences is directed toward these accomplishments. See Figure 17. The four major goals are historic visions that are driving the Biblical Civilization to a future role. Each goal has an engine with energy to accomplish its intent. A vision is the ability to see an invisible dream become visible or become a reality.

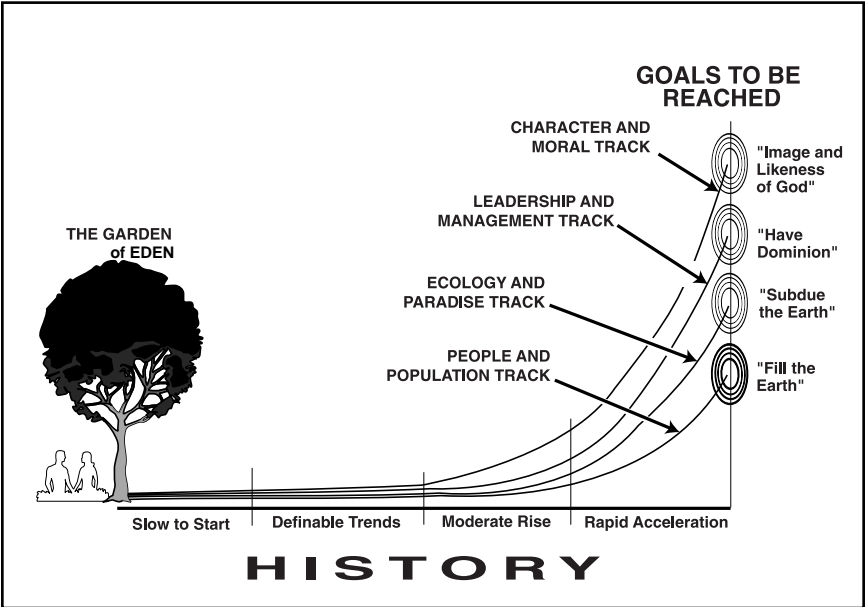


Figure 17 - History and Human Experiences Are Directed Toward Four Goals

Mankind has struggled through the ages to arrive at these goals in thought, action and accomplishment. Both science and religion have made progress toward these goals, but more needs to be done. Genesis, the first book of the Bible is important because it gives us our origin. The origin of matter, life, values, grace, family, nations and even of evil. The most important of all origins is God, who has no beginning. He is the first subject mentioned in the Bible. In the beginning, God created the heaven and the earth. (Gen 1:1) Our sense of worth as human beings depends on our origins. The past is not meaningless as we move ahead into the future.

Nature with its fundamental laws and processes does not need be regulated, legislated or corrected. But playing or mimicking God does. Science and technology is encouraged to assist God with these



four major goals that He has given mankind. (Gen 1:27; Prov 29:18) Science has been invited by God to help implement these goals within the content of the laws of nature. The role of the scientist is not to break natural laws, but to help implement and make these laws operational. For example, any attempt to get rid of the law of gravity is an attempt to rid the earth of human life, as we know it. People will blow away into space.

God has allowed science to take the DNA at its most basic level from one organism and splice it onto a DNA from another to create something absolutely new, such as new living molecules or new genes, and therefore, an improved life. The temptation is enticing to do this without moral and ethical responsibility. The value of this procedure for cell fusion, embryo fertilization, genetic adjustments and organ repair is enormous, but the moral and ethical responsibility is equally enormous. Although genetic engineering is exciting, scientists cannot nor should not attempt to modify or change the cultural and natural process that God has in place for mankind. Does anyone have a God-given right to search for truth?

Design is defined as a plan intended for a purpose. It is to form or conceive an end in the mind. It is to prepare through a decision-making process, to fit into a context, a system or infrastructure. The design of humans by a creative person such as God seldom follows the same pattern of actions as other designs. A creative person will take a novel idea, think it through with a free-wheeling mind, identify loosely the stages that are needed to bring about the creation, involve others as needed such as a team (necessary if the idea is complex), proceed to arrange for resources, develop a schedule or timetable for completion and finally, implement the plan. Man was created, specially by God and did not undergo an evolution. This was confirmed by Christ. (Matt 19:4-6; Mark 10:5-8) This differentiates humans from animals. Animals have no God-consciousness.

#### GOD'S DESIGN PROCESS FOR BEGETTAL HUMANS

No one knows completely and exactly the design and development process God used for creating humans. Some insight can be gathered from the book of Genesis. The Genesis account on begin-

nings gives insight into what is basically wrong with us as individuals. It may show our faults, sinfulness, weaknesses and even our attitude of rebellion against God. The Genesis account is profoundly and spiritually true! If we don't recognize the disobedience of Adam, we run the risk of repeating what happened there. Here is a list of main points in the Genesis account:

1. God exists
2. God's nature is insightful
3. God's creative and begettal process
4. God's planning and the origins of creatures
5. God's creation of an unfinished universe
6. God's creation of time
7. God's creation of humans, which we term begettal humans
8. God's design of free will and free choice
9. God's arrangement of marriage and family
10. God's origin of population
11. God's permission of evil
12. God's prediction of salvation

The word create is to be used by God alone and refers to His bringing into being something that is entirely new. When God forms things from existing material, the word is usually "make" or "made." "Create" refers to the production of new things from nothing or from His glory. See Figure 18.

The design process, not clearly known is illustrated in Figure 19. Cloning may very well be one of the design alternatives God was faced with in the initial phase of the design process. God rejected this alternative since He wanted humans to be more than a biological process of variable, genetic, elements. He wanted humans to be creative, intelligent, emotional and even spiritual. If only we can grasp the superlative design that God conceptualized and the process He was using to reach this design, the process and product would be easily seen as sacred. The process of reproduction produces more than a biological machine, but a special creature of God. Begettal between male and female was decided upon as the best alternative to

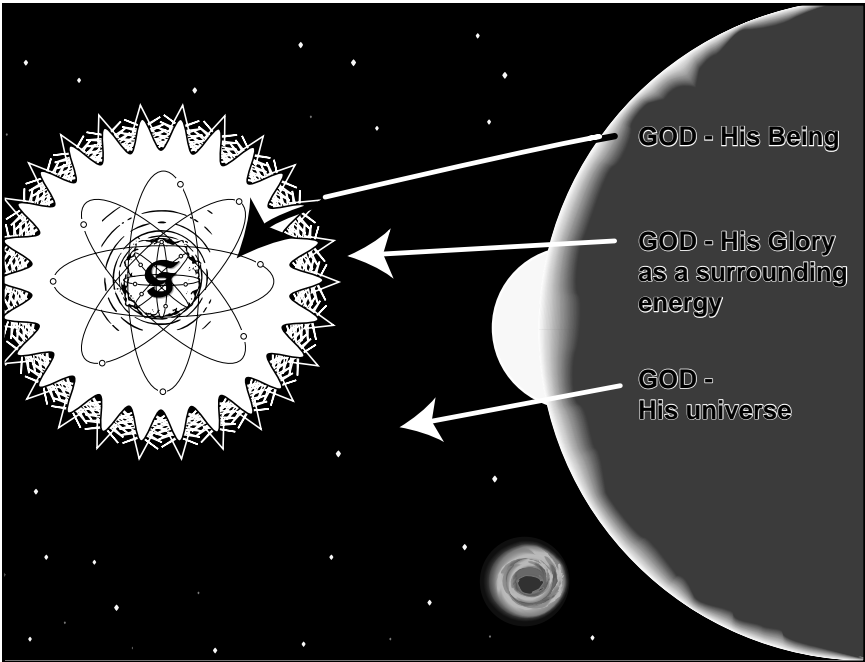


Figure 18 - God Uses His Glory as Well as Material Things to Create

make humans in the image and likeness of God. It seems the design process incorporated the following ten design objectives. A cloning comparison is made with each objective.

1. Begettal humans are in the image of God. Cloning is in the image of a clone donor.

2. Begettal humans are offspring of a process between male and female. Cloning is a process of either male or female exclusively. One does not depend on the other.

3. Begettal humans have a spiritual section in the brain termed the “God spot.” Clonees could have this God spot, but it is uncertain whether it could be stimulated in the same way as begettal humans. The God spot is the endowment God gives to every human. It has recently been verified by scientists, as described in the earlier sections of this book.

4. Begettal humans are separate from other forms of creation. Clones are numerous copies replicating sameness and commonness. This works against God’s universe of diversity.

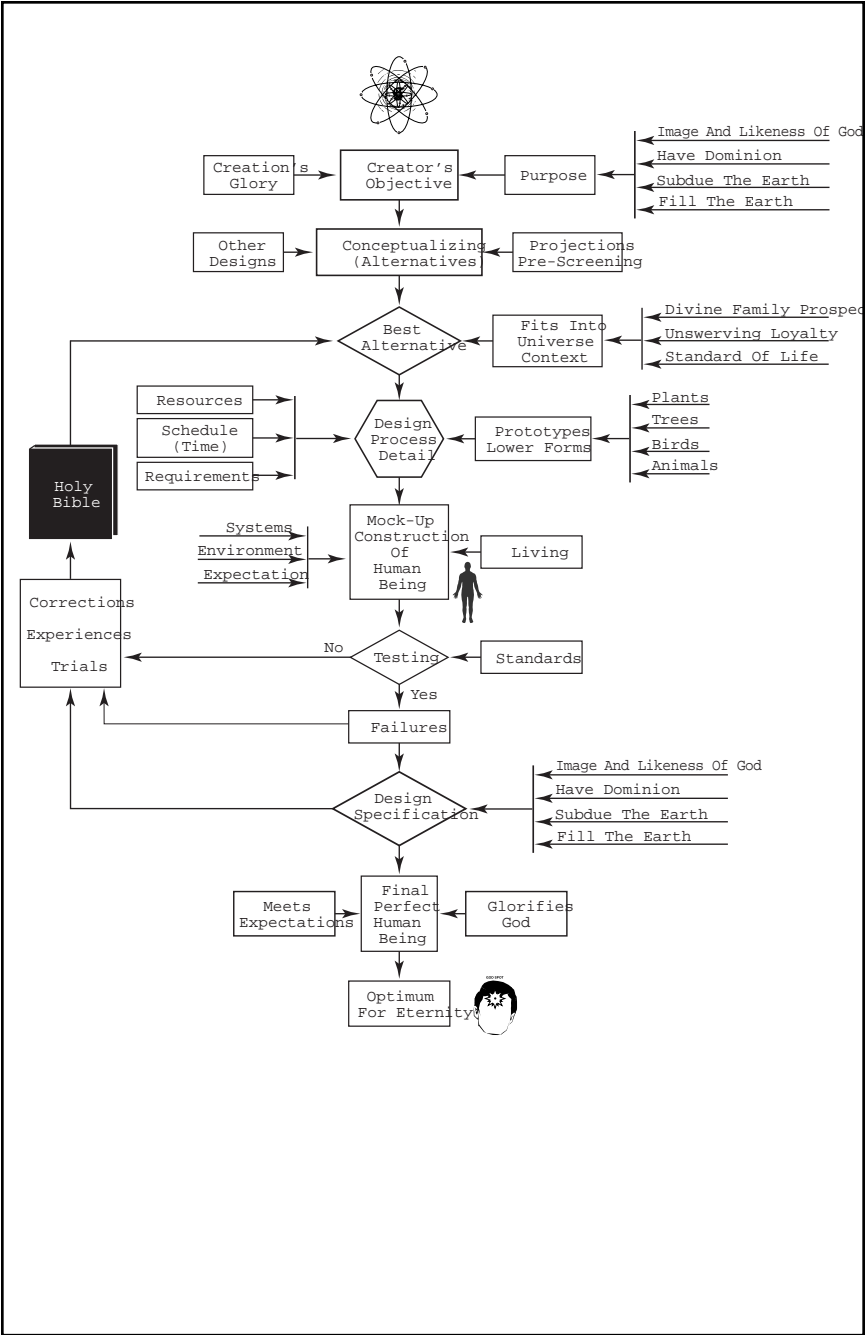


Figure 19 - Possibly God's Design Process for Begettal Humans

5. Begettal humans were originally created directly by God. Subsequent generations were indirect, but by the same process. Clones are made by man. It is questionable whether clones can be replicated over several generations.

6. Begettal humans are to fill the earth with unique individuality among a vast numerical diversity. Clones will fill the earth with common and ordinary stereotypes.

7. Begettal humans do not possess immortal souls. They are souls. Clones are souls since they are living creatures.

8. Begettal humans are recorded in the Book of Remembrance for a resurrection future. It is questionable and argumentative whether clones will qualify for the Book of Remembrance after all clones were made by man and not by God. (Malachi 3:16)

9. Begettal humans are interdependent with environment and universe. Clones are dependent on the genetic package passed on by the donor, one sex only. Whereas, begettal humans are the product of two sexes, male and female.

10. Begettal humans that deviate from God's design result in disaster. Nephilms, as another form of design variation, resulted in disaster known as Noah's Flood.

#### 1. BEGETTAL HUMANS ARE IN THE IMAGE OF GOD. CLONING IS IN THE IMAGE OF A CLONE DONOR.

“And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in His own image, in the image of God created by him; male and female created he them.” (Gen 1:26-27)

The plural form “Let us” calls attention to a team of God, the creator, designer and planner joined in with the Logos, the builder, constructor and developer to bring about begettal humans. See Figure 20.

“Let us make man in our image after our likeness” (Gen 1:26) does not mean the exact image and the exact likeness of God. It does

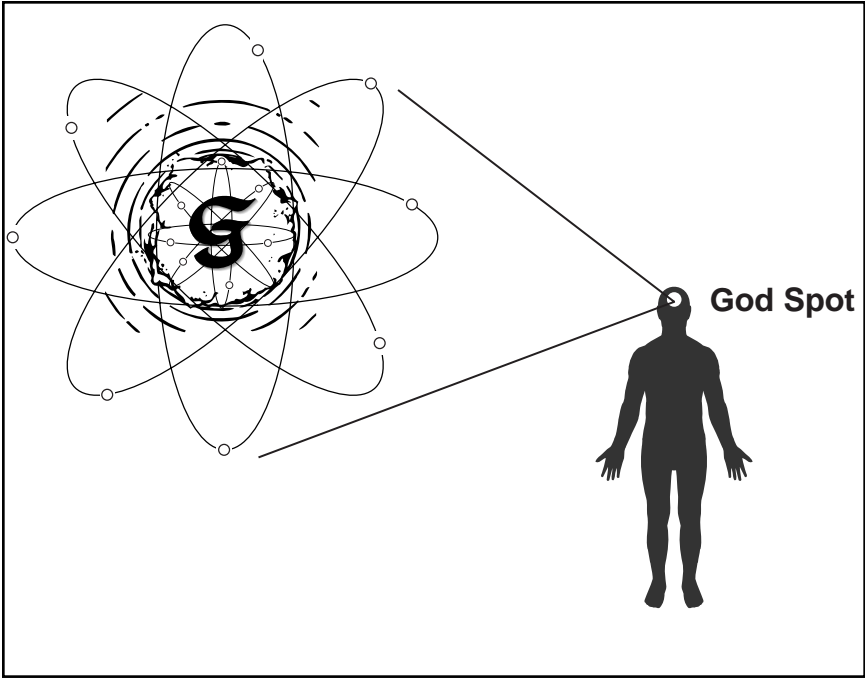


Figure 20 - Godliness in Begettal Humans Is the Practice of God's Four Attributes

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not mean man could become God or that God is struggling to prevent man from replacing Him. It does mean to become like God, to imitate God, to be holy like God, to walk in ways like God, to be merciful like God, to be gracious and long suffering like God and to forgive others like God. The intimation is for man to act and think the way God acts and thinks since God is the superlative model. But there is not an iota of expectation or inference that man can replace the very God who created him!

Man's special endowment from God falls into two categories 1) to be made in God's image and 2) after God's likeness. (Gen 1:26) A careful study of human intellect and capability will confirm these two deeply held endowments described in the Genesis account. These endowments are not physical qualities since God is not physical. They are mental qualities as part and parcel of God's design objectives for humans. These endowments are separate from the animals and the lower forms of life. If one can see a clear manifestation of

these two endowments in a human, it will reveal a faint portrait of God in man as well as woman. The spiritual quality of God's image and likeness is something to be shared by male and female alike. This is to suggest God's major goal with humans in the Biblical Civilization is to reproduce His likeness in humans. This is to say God wants man to be like God, but He does not expect man to become a god. But only when these two endowments are perfect in man can one clearly see God in man. Humans are the only species that possess these two endowments. Other species concern themselves exclusively with food, shelter, safety and mating. Following is a suggested meaning of the two endowments.

a. IMAGE

1. Reasoning and intelligence. Man's thinking is similar to God's. These are the mental powers of memory, will, analysis, synthesis, diagnosis, investigation and rationalization. The first human was perfect morally and mentally, in the beginning of his life.

2. Judgment and decision-making. Man's judgment is similar to God's. These are moral qualities of justice, benevolence and love. God's law is written in the hearts of humans, which gives them a sense of guilt and blame. God wanted man to be a suitable ruler of earth, as God is King of the universe.

3. Freedom of choice and self-rule. Man's independence is similar to God's in making choices. This freedom allows preference, selection, calling and choosing. To be perfect in choice selection is to know the consequences of choice selection.

4. Leadership and problem solving. Man's problem solving is similar to God's ability. This ability allows humans to examine failures for correction. It also enhances successful experiences for future application.

b. LIKENESS

1. Communication and language. Man communicates like God. He has been given language skills to verbalize, articulate, sermonize, preach and talk to individuals as well as to talk in groups.

2. Curiosity and creativity. Man creates like God. Man originates, causes and produces a design plan, task or product.

3. Conscience and morality. Man knows right from wrong like God. Virtue, goodness, and righteousness are practiced by an individual. There is confidence or a frame of mind to be upright. Adam was endowed with the faculty of loving God and others.

4. Sympathetic and emotional. Man feels like God. The emotions of man are similar to the emotions of God. As God feels sadness, jealousy, anger and happiness, so can man emulate these same feelings.

Man was to be a king on earth as God is king of the universe. Man was to be an earthly representation of spiritual God. Man's ability to love and sacrifice parallels that of his Creator.

Clones are not in the image of God. They are in the image of the clone donor. Since the donor is a product of his or her experience, these experiences cannot be passed on. The begettal human being is the product of both female (egg) and male (sperm) with a different environment. This means God's image was channeled through fathers and mothers and not fathers alone, nor mothers alone. There is a huge difference between the natural begetting process between male and female and the artificial arrangement of cloning in the making of children. The artificial arrangement is an inappropriate intervention as "playing God" in some way. The distinction between the natural process for producing life and the artificial process is like the difference between functioning for a variety of purposes with functioning and repeating the same purpose. God's way is reproduction with diversity. The cloning way is reproduction with homogeneity. God's way supports the concept of distinctiveness and dignity for each individual. Each human that God brings to life through the begettal process has a right to his or her own genetic and personal identity. Cloning must be prohibited. God's way must be encouraged, legalized and improved upon until God sees the earth is filled as He has purposed.

2. BEGETTAL HUMANS ARE OFFSPRING OF A PROCESS OF PROCREATION BETWEEN A MALE AND A FEMALE. CLONING IS A PROCESS OF EITHER MALE OR FEMALE EXCLUSIVELY.

"And God blessed them, and God said unto them be fruitful, and



multiply, and fill the earth..." (Gen 1:28)

Cloning is unnatural and immoral because it separates reproduction of humans from God's design for human sexual activity. It should be remembered that it is God who created sex urges in men and women as motivators for engaging in the sex process, which results in the conceptualization of a human baby. God not only put His stamp of approval on marriage, but also expects this process to expand humankind. To circumvent this process is to circumvent God's design and expectations. "Marriage is honorable in all, and the bed undefiled, but whoremongers and adulterers God will judge." (Heb 13:4) See Figure 21.

God made one male and one female that all the nations of men ought to know themselves to be made of one blood, descendants from one common stock that encourage an earthly family. God made the pair capable of transmitting their nature to their offspring. This is accomplished with genetic transmissions. The commission to replenish the earth means to fill the earth with a numerous and lasting collection of humans. This means the commission to fill the earth is a moral responsibility. This is more than a genetic concept. It is to fill the earth with a race of humans that are in the image and likeness of God. In fact, the Apostle Paul's exhortation is to avoid arguments about genealogies because genetic descent has been intertwined and co-mingled by the new way of Christ. (1 Tim 1:4) Cloned humans appear to be strictly a physical and fleshly genetic result.

The commission to fill the earth is a moral responsibility. God gave the commission to Adam and his descendants. We do not know the design figure of population for filling the earth. The capacity of the earth can be enhanced by adding the capacity of the moon and the other planets of the solar system. The population design figure becomes minimal if the Creator decides to add this capacity for human habitation. Interesting to note, the creation of angels was quite different from humans in one important and distinctive way. Humans have the power to decide whether to propagate and reproduce their kind. Angels cannot do this.

Today the average family size, worldwide is about 3-4 children, with an annual growth rate between 2%-10%. Environmentalists

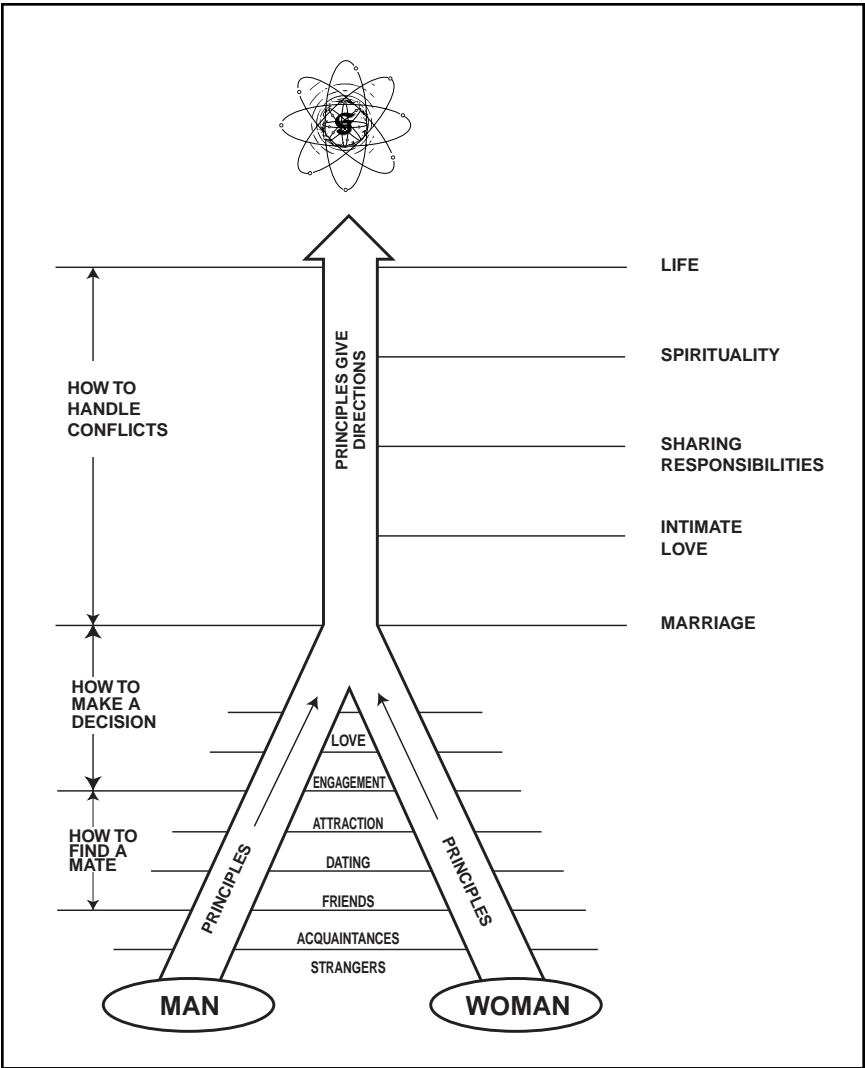


Figure 21 - Marriage Is a Partnership of Three: God, Man and Woman

would like to see the worldwide family size be 1-2 children with a zero-growth rate. The Biblical creation model in the Biblical time line postulates human growth corresponds to the population figure from 6000-7000 years of recorded history. In recent times, population growth has become of critical concern. Statements of gloom and doom have been made over the exponential growth of the human population. Projections by the United Nations have revealed extraordi-

nary growth levels. Presently the earth's population is roughly 6 billion. Experts project by 2005 AD, the growth will be to 10 billion. By 2050 AD it will reach greater than 20 billion. There will be as many people living on planet earth as all the people added together living throughout human history. Billions of human beings, as numerics, should not disturb the analysts since in every other department of creation, the aggregates are in the trillions. There are trillions of stars, trillions of trees, trillions of snowflakes, trillions of insects, birds and fish. The productivity of nature has been enormous. Human population has got to go some to catch up with their living and non-living colleagues in the environment.

Marriage may be defined as the lifelong and exclusive state in which a man and a woman are wholly committed to live with each other in a sexual relationship under conditions normally approved by society. Functionally, marriage has been described as a legal contract, a biological act, an economic arrangement, a social affair and a spiritual reaction to God's commandment.

Marriage is more than a begetting of offspring. Marriage is a social unit where the incompleteness of man or woman is made complete. This means the Apostle Paul's emphasis is more than reproduction. It is about the complementary effects of male and female. Male alone is an incomplete human. Female alone is an incomplete human. When both are made "one flesh" they are complete.

Human design in the context of male and female togetherness becomes a critical and exclusive relationship to achieve important goals. Here are some of the goals:

1. To enjoy companionship, care and sharing between man and woman. (Gen 2:18, 24)
2. To promote love, sexual intimacy and gratification for both partners. (1 Cor 7:1-5)
3. To set down the process of perpetuating life and reproducing humankind. (Gen 1:28)
4. To develop a family unit for raising, caring and training of children to adulthood. (Gen 1:27-28)
5. To preserve and transmit values, principles and advantages

needed in a community. (Col 3:16)

6. To protect and defend offspring against threatening adversaries. (1 Pet 5:8)
7. To have a spiritual helper for the walk in the narrow way. (Gen 2:18)

The goals become practices that follow the begettal process. Cloned individuals do not follow these goals, as clones are freaks, abnormal and deviant to God's human design. There are many references that life exists before birth. In the Book of Psalms, God's care and protection in the womb indicates that life has begun. (Psm 139:13-16; Psm 119:73; Job 10:8; Job 31:15; Is 49:1,5; Jer 1:5) Although the life of the fetus has begun the brain has not developed sufficiently to experience what life is like after birth. Nor does it experience mental, emotional and spiritual awareness until it is delivered. It has capacity, potential and realizable experiences to make it human.

One more point about the prohibition of interfamilial marriage. This is the forbidding of marriage to close blood relations. Mates too closely blood related can experience genetic problems with the immune system. When two distant marriage partners marry, the immunity system is strengthened in the offspring because of the diminished affect of the contribution of male and female. (Lev 18: 6-18; 20:10-21) This is to suggest the immune system of a clonee is weak compared to a begettal human.

### 3. BEGETTAL HUMANS HAVE A SPIRITUAL SECTION IN THE BRAIN TERMED THE "GOD SPOT." IT IS QUESTIONABLE WHETHER CLONES HAVE THIS SPOT.

Deep within the human brain in the frontal lobe, admittedly a controversial location, is a section of the limbic system that is highly correlated with the spirituality of the individual. This is seen in Figure 22. Neurologists have discovered that when this spiritually sensitive section is stimulated a person's spirituality level is increased. Even Atheists have experienced God for the first time with this stimulation. This section of the brain is now called the "God spot," and may very well be the location of the special endowment

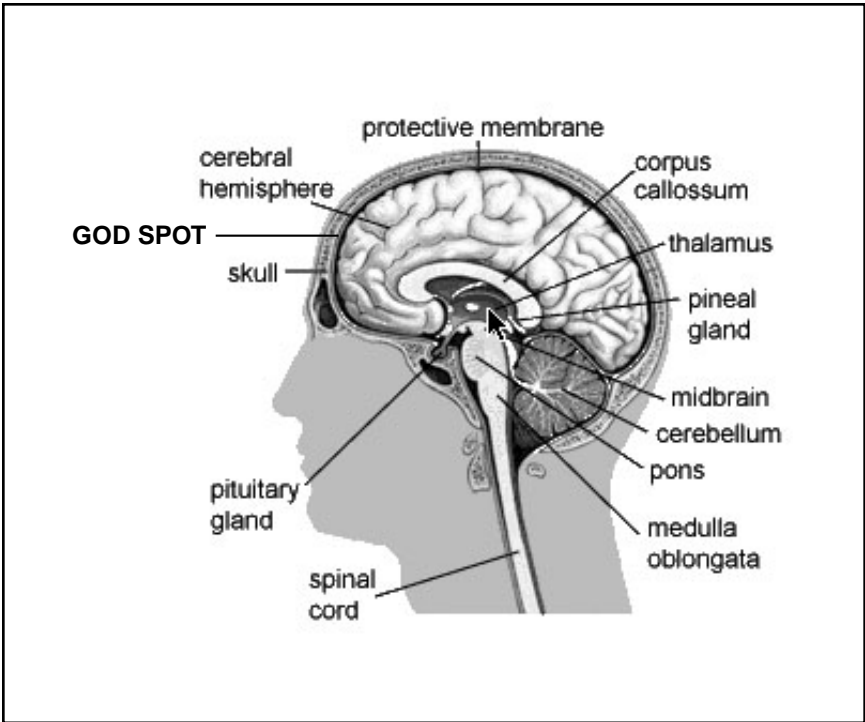


Figure 22 - God Spot in Brain Sensitive to Spirituality

that God gives to every begettal human born by the natural process of procreation between a man and a woman. It is the brain that has this capability from the natural, parental process of begettal. It is not known whether a cloned human has this endowment since the first cloned human has not been developed. However, it has been established without a doubt that the brain content cannot be cloned. One can clone tissues, parts and even a body, but one cannot clone brain content. Also, the spirituality of a person cannot be cloned. The brain houses the mind, the emotions and the spirituality of the person. The content and experiences within these three elements are not inherited nor can they be arranged in the cloning procedure. Brain content, spiritual development and valuable experiences are acquired through life experiences.

#### GOD SPOT ENDOWMENT HAS SEVEN SECTIONS

The endowment section of the limbic system has seven sections,

which represent the gift from God for every human being. These sections, described briefly are:

1. **Consciousness:** This is when a human knows he is alive and aware of the environment, the cosmos and other people. (Heb 2:6) It is of great importance that individuals know they are alive. Other creatures do not know this.

2. **Conscience:** This is the ability of a human to know the difference between right and wrong. It is the sections of the endowment of judging rightly or wrongly. (Ro 2:14)

3. **Morality:** This is the concern with the conduct of character in a sinful and adversarial world. Morality has a lot to do with personality and character. (Heb 8:10)

4. **Intuition:** This is the inborn tendency to behave or respond in a specific and fixed way. It is arriving at a decision without explicit or conscious processes of reasoned thinking. (Psm 108:1)

5. **Affiliation:** This is the natural propensity to seek out the fellowship and companionship of others. There is an affiliation drive. It is the longing for belonging. (2 Cor 8:4)

6. **Mortality:** This is the awareness that life can come to an end. The awareness that there is discontinuity in the life process.

7. **Free will:** This is the faculty of choice. Humans have the freedom to select good or evil. Free will may represent the most significant element in the endowment package that makes humans in the image and likeness of God.

Brain death is truly the death of a human. Brain life, as God wants it, is truly the life of a human. One cannot clone the content of a brain, but one can develop a brain to be in the image and likeness of God if the process of two parents, male and female is followed.

#### 4. BEGETTAL HUMANS ARE SEPARATE AND UNIQUE FROM OTHER FORMS OF CREATION.

God could have brought all the different species of plant and animal life into being through an evolutionary process. There are similarities among the creatures. Plant life absorbs carbon dioxide, while giving off oxygen. Cattle absorb oxygen, while giving off carbon diox-

ide. Frogs have a digestive and respiratory system similar to monkeys. The design similarities between and among the various species tend to suggest during the evolutionary period, God interchanged, changed and adopted designs in and among the species. He, then, after a period, fixed the species in such a manner that the species is replicated, but not interchanged. There are no links between the species. There is only a focused process for each species to be perpetuated. They do not change or interchange from one species to another. We see a fixity of species as we observe that in nature. The scripture supports this in Genesis 1:24-25. “And God said, let the earth bring forth the living creature after its kind, cattle and creeping thing and beast of the earth after his kind and it was so. And God made the beast of the earth after his kind, and cattle after their kind, and everything that creepeth upon the earth after his kind and God saw it was good.”

The final act of God’s creation was at the close of the sixth epoch day when God created a human. It was distinctly stated that God finished his creative work, not on the sixth, but on the seventh day with the division of humans into two different persons, two different brains, two different sexes, two different reproductive capabilities and two different DNA complements. (Gen 2:1-2) This means humans are to be the product and offspring of two different progenitors. This is in contradiction to creating one human being as a product and offspring of one progenitor, one sex, one brain, one reproductive capability and one DNA complement.

Humans were a special creation different from the lower forms. “And the earth brought forth grass,” (Gen 1:2) The waters brought forth the creeping creature, and the earth brought forth living creatures after their kind. (Gen 1:20-25) But with man, “Let us make man in our image, and after our likeness.” (Gen 1:22) Animals do not have God’s image. No one needs to be convinced of that. Humans, therefore, have a special duty to care for animals, because God created and entrusted them to humans for care and protection.

Here are some distinctions between humans and animals.

| <b>Factor</b>  | <b>Animals</b>   | <b>Humans</b>   |
|--|--|---|
| <b>a) Reasoning</b><br><b>b) Judgment</b><br><b>c) Freedom of choice</b><br><b>d) Leadership</b> | <b>instinctive</b><br><b>impulsive</b><br><b>constrained</b><br><b>intuitive</b> | <b>learned</b><br><b>comprehensive</b><br><b>independent</b><br><b>applicable</b> |
| <b>Image Likeness</b>  |  |   |
| <b>a) Language</b><br><b>b) Creativity</b><br><b>c) Conscience</b><br><b>d) Sympathetic</b>      | <b>gesture</b><br><b>routine</b><br><b>amoral</b><br><b>some feelings</b>        | <b>oral words</b><br><b>inventive</b><br><b>moral</b><br><b>much feelings</b>     |

To summarize, God may have brought about creation by a development process, but at a later time fixed the species so that the development process came to an end. Additionally, God created man pure and perfect, not through evolution, but through a special creative act that made him mentally endowed in the image and likeness of God. Man's brain endowment is vastly different from the brains of all brutes, which are products of the development process. Even the brain sizes are different. The brains of humans are larger and more developed than those of the lower primates.

5. BEGETTAL HUMANS WERE ORIGINALLY CREATED DIRECTLY BY GOD. SUBSEQUENT GENERATIONS WERE INDIRECT, BUT STILL OF GOD. CLONES ARE ARRANGED BY MAN.

Begettal humans come from sexual partners. The original pair, Adam and Eve was created directly by God. Adam came first from the 23 elements of dust. Secondly, woman was taken from man's side. (Gen 2:18-22) "And the LORD God said, It is not good that the man should be alone; I will make him a helper for him. And out of the ground the Lord God formed every beast of the field, and every fowl of the air, and brought them unto Adam to see what he would call them; and whatsoever Adam called every living creature, that was the name thereof. And Adam gave names to all cattle, and to the fowl of



the air, and to every beast of the field; but for Adam there was not found a helper for him. And the Lord God caused a deep sleep to fall upon Adam, and he slept; and God took one of his ribs, and closed up the flesh instead thereof. And the rib, which the LORD God had taken from man, made he a woman, and brought her unto the man.” God institutes marriage. “And Adam said, This is now bone of my bones, and flesh of my flesh; she shall be called Woman, because she was taken out of Man. Therefore shall a man leave his father and his mother, and shall cleave unto his wife; and they shall be one flesh.” (Gen 2:23-24)

Since God made woman from Adam’s side, it sounds suspiciously like God cloned woman from man. If God did it, it must be OK. But technically, this cannot be done and here is why: a woman can never be cloned from a man because of the difference in the two sex chromosomes. Men are XY while women are XX. See Figure 23. A begettal human needs 23 chromosomes from a male and 23 from a female to make up the 46 needed. Cloned women can come only from women. Cloned men can only come from men. When woman was taken out of man, which God chose to do, it was clearly a miracle and God circumvented His own design process.

Only God has the right to create life and every creature of God is good. (I Tim 4:4) Here is what God said, “See now that I, even I, am

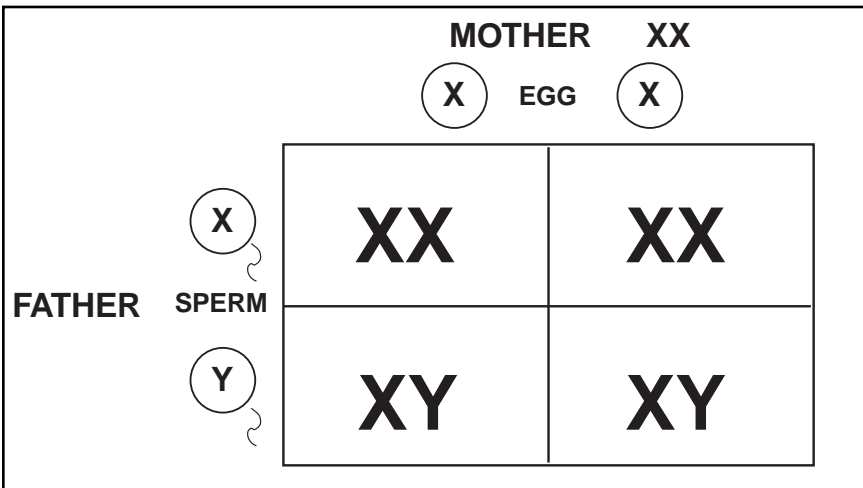


Figure 23 - Genetic Arrangement of Male and Female

he, and there is no god with me: I kill, and I make alive; I wound, and I heal: neither is there any that can deliver out of my hand. For I lift up my hand to heaven, and say, I live forever.” (Duet 32:39-40) “For, behold, I create new heavens and a new earth and the former shall not be remembered, nor come to mind.” (Isa 65:17) “In the beginning God created the heaven and the earth.” (Gen 1:1) “I have made the earth, and created man upon it: I, even my hands, have stretched out the heavens, and all their host have I commanded.” (Isa 45:12)

6. BEGETTAL HUMANS ARE TO FILL THE EARTH WITH UNIQUE INDIVIDUALITY AMONGST A VAST NUMERICAL DIVERSITY. CLONES WOULD FILL THE EARTH WITH COMMON AND ORDINARY STEREOTYPES.

Consider the vast numerical elements that exist in the universe, where aggregates are found in the billions, trillions, quadrillions, quintillions and even sextillions, is it happenstance or an accident that no two are alike and exact in every detail? See Figure 24.

God’s design enhances diversity! No two snowflakes are alike. No two stars are alike. No two trees are alike. No two angels are alike

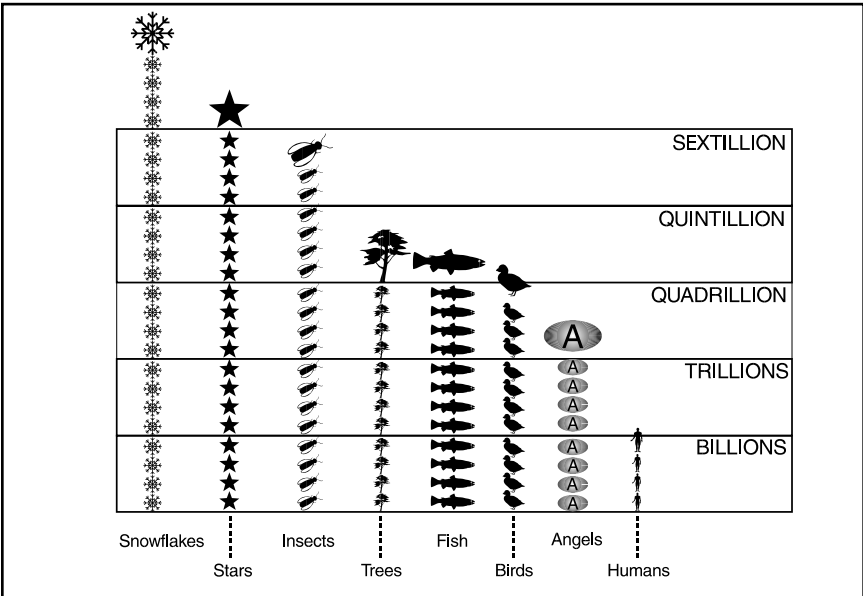


Figure 24 -Conceptual View of the Number of Humans Compared to Other Aggregates

and no two begettal humans are exactly alike.

Our planet earth is shared by more than 5 million different species of living things. Human beings of all colors, races, physical features, mental abilities and nationalities make up just one specie. There are over 20,000 different species of insects. Beetles alone make up over 290,000 species. Birds have over 10,000 species. Flowering plant species are over 250,000 in number. These and other example give tangible evidence of the environmental diversity found on planet Earth. The world and even the universe around us reveal the doctrine of variance in God's creation and design. Sheer diversity is in itself a basis of praise to the creator. The doctrine of variance is the creator's major guideline in creativity. Cloned humans move in the opposite direction so that the doctrine of sameness is firmly established in clone reproduction. Individual uniqueness is seen as morally significant. Individual genetic diversity and sexual reproduction with two partners by and large ensure diversity will continue. Some have argued that genetic identity is not the same as personal identity and thus does not threaten the distinctiveness of persons. To this we agree. Personal identity results from desires, beliefs, intentions, memories and experiences. Genetic identity only gives the propensity and capacity to physically resemble and have a likeness of traits as the parent donor.

Genesis 1:26 has created in the Western culture a firm belief in the distinctiveness of each individual. No matter what our philosophy may be, we believe that first we are individuals, unique and separate. Any variation from this belief seems obnoxious and even rejectionable. We know quickly when deformity occurs. For example, Siamese twins often portray a grotesque form, which is repugnant. We appreciate what normality is when we view Siamese twins. That is, we know that each human being should be distinctly different from all others, but not by deformities. Any attempt at sameness, even by an abnormal process of nature is viewed with disdain. See Figure 25. In historic Sardinia in 1829, Rita and Christina were born with two heads, four arms and only a single lower body with two legs. Rita and Christina died in infancy, but many questions were raised about Siamese twins. Did Rita and Christina have two souls because of the two heads and the two brains in spite of the shared remaining body

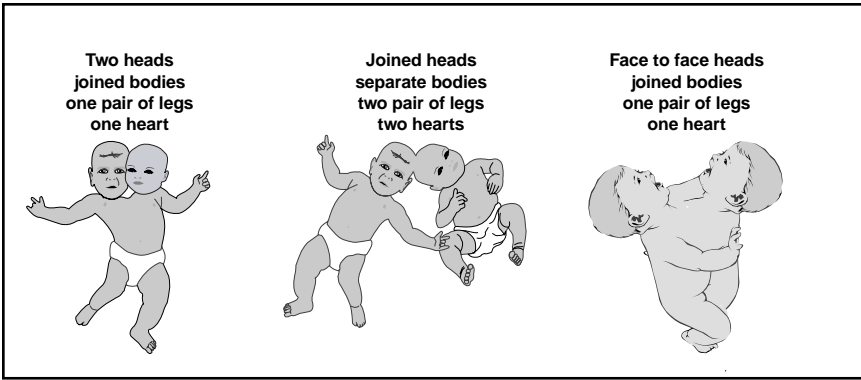


Figure 25 - Siamese Twins Are a Contradiction to Human Individuality

parts? Identical twins are clones of nature far closer than Dolly and her mother. Siamese twins are abnormal clones of nature, which in most cases are repugnant.

Identical twins are not exactly and precisely identical. There are variations, if not in the external appearance, but in the internal parts. Every human being is unique and identifiable by God. In the parable of the sower and talents, Christ spoke about everyone having a variety of gifts. (Matt 13:23; 25:15; 25:29) Possessing a variety of gifts would result in a variety of humans. Paul emphasized the need to use our unique gifts if we are to fulfill the role God has for us. “Having then the gifts differing according to the grace that is given ... to the proportion of faith.” (Ro 12:6) Variation can be inherited or environmentally acquired. But even environmental variations depend on the underlying genetic reaction system. Humans depend on the 23 chromosomes supplied by the father and the 23 from the mother. If the fusion between two paternal and maternal gametes, do not occur, begettal humans could not be produced. Those 46 threads of a single and chemically understood complex between protein and deoxyribonucleic acid (DNA) form the ultimate biological basis of every human being brought about by the begettal process. This process does not happen with cloned humans. We are not all the same physically, emotionally, mentally and biologically, and as we are not the same spiritually. The earth is filled with unique individuals amid a vast numerical variance. It seems cloning humans goes against God’s laws and processes by creating sameness, duplicity, alikeness and

monotony. We are all alike as far as the image of God, but we are all different in the practice of this image.

Sexual and human differences antedate the fall of man in the Garden of Eden. When God said it “is good,” He was pleased with the individual traits to form diversity must be His design. To live a full life, we must express our individuality and not our sameness. It is man’s rule, regulation and even design to create sameness in a world of diversity. But it is not God’s rule. Cloning could cause the individuals to lose identity, and in this process trivialize dignity. Cloned humans might be indistinguishable as mass-produced products. Cloning through multiplication of self might cause a human to lose a sense of self or cause what he sees around him to be human copies. To reduce diversity to an oneness blueprint and produce replica humans on demand would seem to go against something basic to the God given nature of life and creation.

a) I Cor 12:4-6 - “Now there are diversities of gifts, but the same Spirit. And there are differences of administrations, but the same Lord. And there are diversities of operations, but it is the same God...”

b) I Cor 12:10 (Living Bible) - “He gives power for doing miracles to some and to others power to prophecy and preach. He gives someone else the power to know... and others who do not know the language and are given power to understand.”

c) Psm 8:4-6 - “What is man, that thou are mindful of him? and the son of man, that thou visiteth him? For thou has made him a little lower than the angels, and has crowned him with glory and honor. Thou madest him to have dominion over the works of thy hands; thou hast put all things under his feet.”

**7. BEGETTAL HUMANS DO NOT POSSESS IMMORTAL SOULS. CLONES DO NOT HAVE IMMORTAL SOULS. SOULS BY DEFINITION REPRESENT LIFE, BOTH BEGETTAL AND CLONED LIFE.**

One of the most fundamental concerns of human cloning is the effect of cloning on the soul of the donor and the donee. Will the clone be a clone of only the body with a soul or clone of only the body? Will it be just the soul or both body and soul or something

else? Many people feel and believe souls of humans are immortal. If this were true, will cloning produce copies of immortal beings as well as cloned bodies? Will the parent donor share his or her soul with the copy? If clones receive a soul as well as a body, does that mean science is cloning souls as well as humans? When the clone dies does its soul die or does it continue as an immortal in the age of eternity? If someone kills a clone for its parts, do they kill the soul for its parts? Do scientists, when they embark on the quest to clone a human, think about whether they are cloning the soul as well? Any discussion of the human soul falls more into the area of theology rather than the area of biotechnology. Should not both scientists and theologians be concerned with these issues?

One of the most widely accepted doctrines of Christendom is the acceptance of the soul's immortality. This belief has been transmitted from pagan and mythological sources to the early Christian church. It is the idea that the soul continues after the dissolution of the body. The immortality of the soul has no scriptural support from the Bible. This idea is of heathen origin. Consider the following scriptures that indicate the soul can die and can be destroyed.

a) Ezekiel 18:4 - "The soul that sinneth, it shall die." If it can die, it certainly is not immortal. This seems to imply that the soul is singly of mortal life. Upon physical death the life or soul ceases to have being, existence or activity.

b) Gen 2:7 - "And the LORD God formed man of the dust of the ground and breathed into his nostrils the breath of life; and man became a living soul." This scripture states the Bible teaches that God blew the breath of life into the man and he became a living soul. It does state that man has a living soul, but he became a living soul after receiving the breath of life into his physical being and existence. Coming to life has all the characteristics opposite to death. Death is simply the cessation of these functions. The conclusion is, the soul is mortal and subject to death.

c) 1 Cor 15:53 - "This mortal must put on immortality." When the Apostle Paul said that this mortal has put on immortality, he categorically signifies at some future time that man can attain the immortal state of existence if he qualifies. This means immortality is

not possessed, but is something to be sought after. It can be possessed when pursued. Why seek it if you already have it? Paul supports this in Ro 2:7 with, "To them who patient continuance in will doing seek for glory and honor and immortality." If these scriptures signify immortality must be sought after, why does Christendom believe that humans have it already?

d) Job 14:14 - "If a man die, shall he live again?" Job was raising an important point; if a man dies will there be a life again. If the soul continues after the body dies, why would we ask if life would continue?

e) Matt 10:28 - "Fear him who is able to destroy both soul and body in hell." (Gehenna) This means to have respect for God who can remove all possibilities for everlasting life.

f) 1 Cor 15:45 - "The first man Adam was made a living soul; the last Adam was made a quickening spirit." Adam was the first human being. All people descended from him. He and all his descendants were made living souls. The last Adam represents Jesus, who was made into a spiritual creature.

g) James 5:20 - "He which converteth the sinner from the error of his way, shall save a soul from death." Unless souls are saved, the soul dies.

h) Acts 3:23 - "Every soul which will not hear that prophet shall be destroyed from among the people." Every creature, including angels, who refuse to comply with the prophet's message, will have their soul destroyed.

i) Rev 16:3 - "And every living soul died in the sea." This means every living being, in the restless masses, can and will die. There are no immortals to be exempt.

If the soul has immortality as most religions claim, what has happened to the souls of Adam, Moses, Abraham, David and all the holy prophets if their souls had not ascended into heaven as Christ had said in John 3:13? "No man has ascended into heaven." The scriptures are teaching when a person dies, they rest in their graves until they are retrieved from their graves in the resurrection. It will be then that God will render unto every man, according to his deeds. (Ro 2:6)

Nowhere in the scriptures can one find the expressions:

“immortal soul”

“soul lives on, your body dies”

“humans are born with an immortal soul”

In fact, Matt 10:28 states, “God is able to destroy both soul and body.” If a person is immortal how can they be destroyed? Immortality means not liable or subject to death. Immortality means death proof! If God is able to destroy the soul, it means He can destroy life.

The body is not the soul, nor is the soul within the body. The soul is the life that is created by a combination of the breath of life as well as the body. It is a living being, but a human and not a spirit being. Man becomes a living soul when he is born. Anyone or any creature that has life has a soul. This means they have life. Take away the breath or the body and the soul will die. Lower animals also have souls. (Gen 1:30) “Let the waters bring forth the moving creatures that hath life (a living soul).” How does the spirit fit in with the soul and body? (1Thess 5:23) Paul says, “...your whole spirit and soul and body be preserved blameless.” Spirit means either a spiritual person or the influence from a spirit person. God’s world is a spiritual influence. Here is an illustrative metaphor of the light bulb that pulls together the components of producing a living soul. Figure 26 is a good analogy of how a soul cannot exist without life. Note from the illustration Figure 26. The light is emitted only when all components are present and functioning. The removal of any one of these components will destroy the light. This depiction is analogous to the death of the soul. Soul and life are words that can be used interchangeably. You are a soul because you are alive.

The immortal soul doctrine emerged originally from the lie that Satan gave in the Garden of Eden to the original pair when he said that if they ate of the forbidden fruit they would not die, but will become like gods. (Gen 3:4-5) It was a vicious and deadly lie that eventually transformed into the doctrine of transmigration of souls with immortality a central feature. As a result the doctrine of the resurrection has been lost. After all, if death triggers the release of the soul to heaven, hell or purgatory, is there any need for a resurrection?



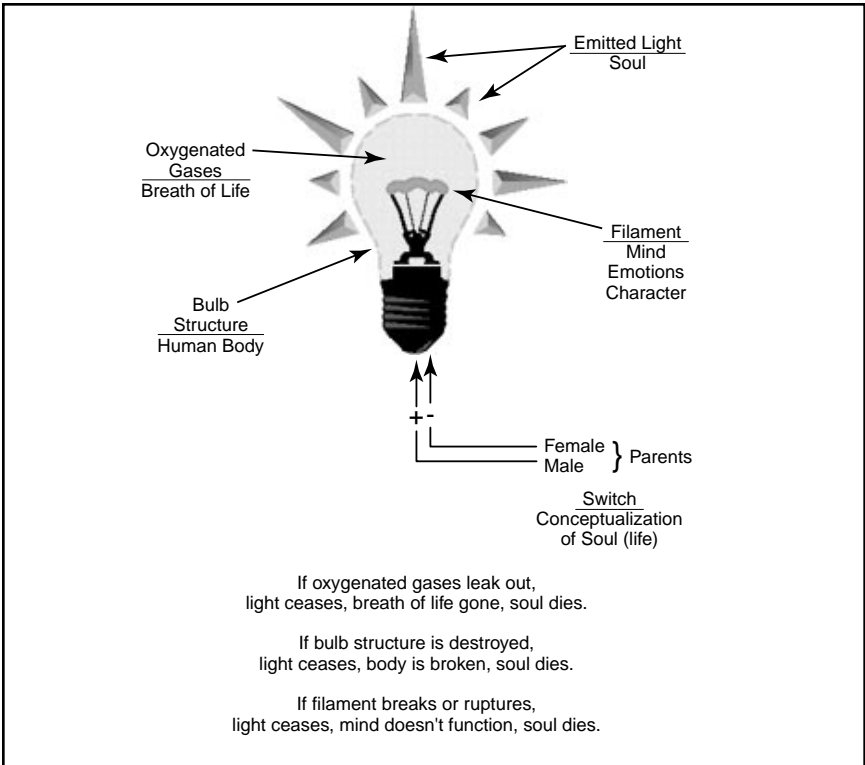


Figure 26 - Light Bulb Metaphor for a Human Soul

There is a serious question whether a cloned human will be recorded in the Book of Life to qualify for an eternal existence. Not all humans, let alone cloned humans are recorded in the Book of Life. (Rev 17:8; 20:12; 21:27) “And if any man shall take away from the words of the book of this prophecy, God shall take away his part out of the book of life, and out of the holy city, and from the things which are written in this book.” (Rev 22:19)

If a soul is the combination of the body and the breath of life, then the soul can be copied as in human cloning. Immortality cannot be copied since it is given by God according to a person’s deeds, record and faith. When a person dies, the breath of life returns to God who gave it. A human clone may be technically possible; nonetheless, the brain cannot be cloned under any conceivable situation.

8. BEGETTAL HUMANS ARE RECORDED IN THE BOOK OF REMEMBRANCE FOR A RESURRECTION FUTURE. IT IS QUESTIONABLE

WHETHER CLONES WILL QUALIFY FOR THE BOOK OF REMEMBRANCE.  
(MAL 3:16)

The Book of Remembrance is a record of all humans that have ever lived and died under the Adamic condemnation. They are the individuals who will be retrieved from the Adamic death condition with a second chance for life, identified as the resurrection. This is stated in Rev 20:12-13, “And I saw the dead, small and great, stand before God: and the books were opened: and another book was opened which is the book of life: and the dead were judged out of those things which were written in the books, according to their works. And the sea gave up the dead which were in it ... and they were judged every man according to their works.” The dead referred to here were those whom Jesus said, “Let the dead bury their dead.” (Matt 8:22) God’s system of remembrance includes births, deaths, marriages and genealogies. Especially marriages as God said, “It is not good that man should be alone; I will make him an helper for him.” (Gen 2:18) Also from Gen 2:24, “Therefore shall a man leave his father and his mother, and shall cleave unto his wife: and they shall be one flesh.” God’s definition of a human is a being resulting from the begetting of male and female. These are the individuals who are recorded in God’s book of remembrance. “And, behold, I come quickly; and my reward is with me, to give every man according as his work shall be.” (Rev 22:12) As you think about 20 to 30 billion people to be resurrected, most from the dust, many from the sea, one must be impressed with God’s unique recording and retrieval system. There can also be a blotting out. “Let them be blotted out of the book of the living, and not be written with the righteous.” (Psm 69:28) “...and with other my fellow laborers, whose names are in the book of life.” (Phil 4:3) “He overcometh, the same shall be clothed in white raiment, and I will not blot his name out of the book of life.” (Rev 3:5)

God keeps track of everything. God does not lose or forget things. What God has started in this reproductive system of bringing about humans is not only recorded, but a system for retrieval is also noted. This is the future concept of resurrection. The promise of resurrecting humans has been formalized and committed by God. A graphic illustration of the resurrection process for all people is seen in Figure 27.

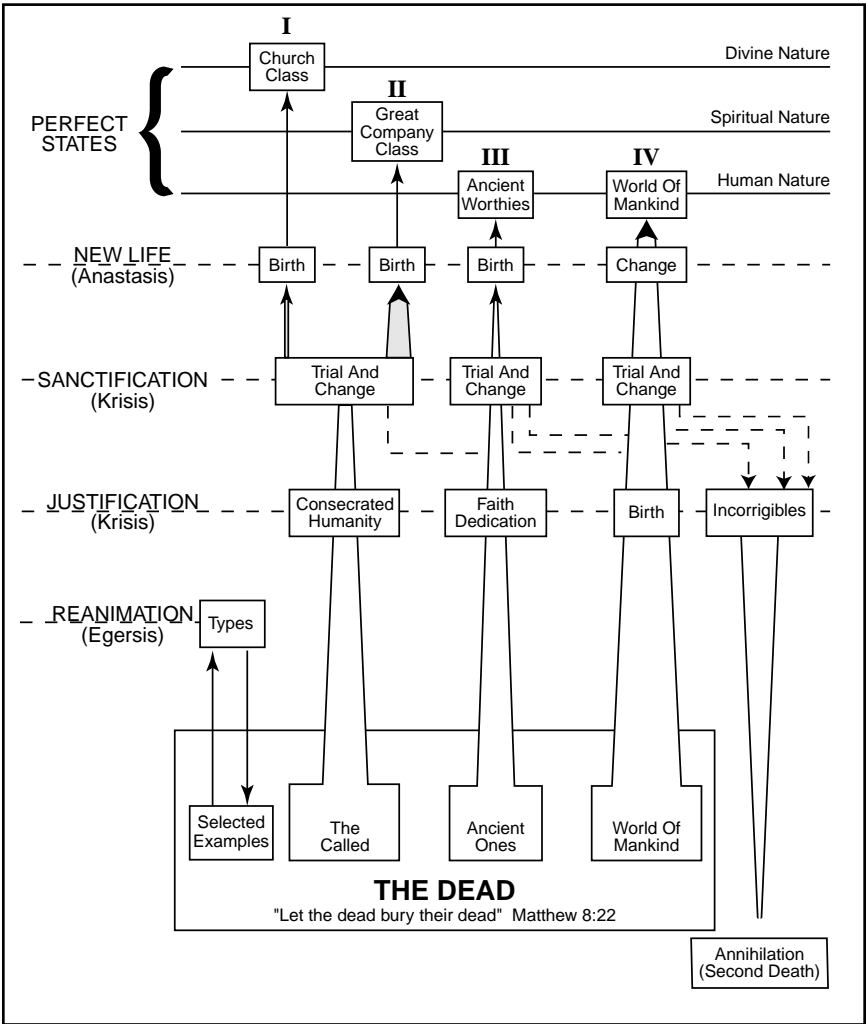


Figure 27 - An Overview of the Resurrection of All People

Cloning humans, once started, will divide humanity into two parts: cloned humans and begettal humans. It is not likely the cloned humans will qualify for the promised resurrection. After all, who is retrieved? The cloned one or the original donor? If the original donor qualifies for the Book of Remembrance, will all the cloned ones qualify?

### 1. Purpose of Resurrection

- a. To bring to an end Adamic condemnation. (1 Cor 15:22)
- b. To empty filled and overflowing graves. (Rev 20:13)
- c. To strike a fatal blow against the death condition - God's enemy. (1 Cor 15:25-26)
- d. To reveal God's power on both living and dead. (2 Tim 4:1)
- e. To show the wisdom of the permission of evil as part of God's plan. (Gen 3:22)
- f. To give everyone an opportunity to start over to earn eternal life. (1 Tim 2:6; 1 Pet 1:3,4)

## 2. Importance of Resurrection

The resurrection of all humans is an astounding proposition. It defies the laws of nature. For people to come back to roam the earth is a proposition that demands the highest level of faith not usually found.

- a. Memories and experiences of individuals will be returned intact. New experiences must give lessons and guidelines for the future life.
  - b. All classes will be resurrected in a progression, which will take time. "But many that are first shall be last; and the last shall be first." (Matt 19:30)
- ## 3. Preparation Signs of the "Krisis" Resurrection for the World of Mankind
- a. Zero population movements are in full swing as the earth is filling up. (Gen 1:28)
  - b. Animal sanctuaries and zoos are growing. There will be no resurrection of animals.
  - c. Greenhouse effect is reducing extremities of climates.
  - d. Health food and dietary movements have started to create a lifestyle that promotes longevity.
  - e. World's capacity to handle and house large populations is being developed.
  - f. Medical advances to remove age-old diseases and introduce life-sustaining practices are escalating.

9. BEGETTAL HUMANS ARE INTERDEPENDENT WITH ENVIRONMENT AND UNIVERSE. CLONES ARE DEPENDENT ON EXPERIENCES OF THE DONOR.

How do we relate to others and to things around us? How do we fit into an overall context? Why are we dependent on so many things to sustain life? A purposeful universe suggests the endless variety of elements on earth as well as in the cosmos have an interactive and interdependent relationship. Everything is held together in a hierarchical order of levels and interrelated functions. Nutrient soil cannot function without rain and temperature. Plants cannot live without soil that feeds them. Animals and humans cannot live without the plants. All in turn are nourished by the sun. Planets cannot exist alone. They revolve about their stars. Stars are part of the orbiting solar systems. Solar systems are held in place by the galaxies. All, in turn, depend on their central black holes, which restore their energies and perpetuate their existence. All in the world and the cosmos are dependent on others in one way or another. One cannot exist apart from the other. Everyone serves everyone. Everything depends on everything. God has made no one absolute. Dependence is a perpetual call. It has been ordered that humans are in need of each other. This is one reason why humans must learn to love each other since their existence is vitally dependent on others. This vast interdependence serves a hierarchy up to the highest level. Going up the hierarchy means going up in complexity. Going down the hierarchy means going down to simplicity.

The meaning of self-existence in the context of the way things are is to see, understand and acknowledge one's place in the total matrix of the surrounding worlds. It is like being a puzzle piece that fits to form the total picture. The universal variety with the enormous abundance is held together in a unique macro and micro unity. This phenomenal unity requires a system of laws, which regulates and controls order and harmony and gives the universe a sense of equilibrium. This order and harmony is not arbitrary, but is the result of a designed universe. A universe, in which every component serves. This interdependence might be called the "law of service." There are components, which serve upward, downward, sideward, inward and outward. The search for meaning is to see and know the law of order

and the law of service operating in the universe. Serving each other and each thing sustains the system of which we are a part. When everyone and everything serves, life is no longer meaningless. God's creative activity was conducted and motivated by love since God is love. (1 Jn 4:8) Any image of God would then see love as a motivating factor. The begettal human from the sexual process is the result of interpersonal love. That which is created without love, appears to be unlike God and unlike His image.

Interdependence is emerging as the dominate principle of the future. We must learn how to make interconnections between people, principles and events. This is especially true within interconnected regional pockets of interest. While each pocket will have its own goals and activities, developments in one pocket will influence conditions in all pockets. Nothing is isolated. We can only understand one phenomenon if we look at it in relation to the totality of which it is a part.

“In the beginning” of creation events unfold, which suggests a start, a plot, a rhythm, a vibration, and a plan, which over the many centuries and millennia produced a movement. But God allowed the movement to result in free choice and varied adaptations. Toynbee's 34 civilizations are manifestations of these many and varied choices. “In the beginning” suggests a new design within the context of a new plan. God was the great cause producing phenomenal effects. These effects we see in life, nature, beauty, order, symmetry and systems. The organic world in this new design has intricately constructed parts that work together for originating and sustaining human life. All organisms including plants and animals depend upon one another and are designed to cooperate for the purpose intended. Life and ways to sustain it are written into a cosmic code. A cover story by Robert Wright in *Time Magazine* (12/28/92) supports the idea that “the universe seems calibrated for life's existence, purpose and design.” If the force of gravity were pushed upward, just a few units, stars would burn out faster, leaving little time for the existence of non-living bodies as well as living ones. Even if protons and neutrons are changed by a small iota, stars may have never been born since the hydrogen that feeds them would not exist. This extremely sensitive equilibrium supports the view that the cosmos and earthly sys-

tems did not come about by coincidence or happenstance. It is a purposeful plan regulated to sustain the design of the universe and life, as we know it. We are now only gradually, working out the stages in a scheduled time sequence.

One of God's major goals for humankind is to "subdue the earth." (Gen 1:28) The new biotechnologies increase the power scientists have over the natural laws in nature. Subduing the earth does not mean changing the natural laws like reducing the time it takes for the earth to rotate, 24 hours on its axis thus creating day and night. But it does mean to make efficient, productive and useful the activity that occurs within the 24-hour period. God does expect scientists to improve the vitality and the activities of living entities.

#### 10. BEGETTAL HUMAN DESIGN THAT DEVIATES FROM GOD'S DESIGN RESULTS IN DISASTER. THE NEPHILIMS AS ANOTHER FORM OF DESIGN VARIATION BROUGHT ABOUT THE END OF THE FIRST CIVILIZED WORLD.

Morality does not make a godly person, yet no person can be godly without it. The true grandeur of humanity is in the moral elevation of its society. If there are enough godly people in a society, the society will result in a godly civilization. If not it becomes an evil civilization. The pre-Noahic period was so depraved that God announced his intention to erase every terrestrial creature. (Gen 6:5-7) It is because of this degeneracy that the great flood came. The exception to the destruction was one human family and two representatives of each animal species. God was to start anew with this one family and the saved representative species. It was this family who was privileged to continue the values and the mission of the Biblical Civilization to the next period in the Biblical saga.

Noah and his family were selected by God to "restart" the human experience toward the goals of the Biblical Civilization. God saw Noah as a righteous man, having the righteousness that comes from faith. The record indicates, "Noah walked with God." (Gen 6:9) Interesting to note that Noah and Enoch are the only antediluvians of whom it is said, they "walked with God." Enoch, the son of Jared, lived for 350 years. Little is known of him except his great faithfulness, as the scripture says, "God took him." (Gen 5:22-23) Noah and

his family members did not lose their morality as their contemporaries did. He was described as being without fault. Noah, son of Lemech, was the tenth in descent from Adam.

The issues during the pre-flood period were significant, life-threatening and seriously deviant from the original design. The corruption and violence caused great sorrow and grief for God. The free-will endowment given to humans was resulting in an escalating evil. It was out of control. How bad was it? Some details will be presented in further sections of this chapter. But generally, it fits the description found in Psalm 14:2-5 and Romans 3:10-18. "There is none righteous, no, not one: There is none that understandeth, there is none that seeketh after God. They are all gone out of the way, they are together become unprofitable; there is none that doeth good, no, not one. Their throat is an open sepulcher; with their tongues they have used deceit; the poison of asps is under their lips; whose mouth is full of cursing and bitterness, their feet are swift to shed blood: Destruction and misery are their ways: and the way of peace have they not known: There is no fear of God before their eyes." These scriptures speak of a society, which no longer recognized God. There was no restraint to the freedom endowment. There was no conformance to the original Edenic Covenant. Humans lied, hated and slandered. The acts of murder, fornication, adultery, stealing, wars, lawlessness and killing were rampant. Society had gone out of control. Even the animals were affected. A new breed of humans had emerged on earth. This new society was deviant from a godly society in a major way.

God's regret of creating humans was at a point in which He was close to admitting failure for making humans into his image and likeness. But He saw the solution was through Noah and his family to save the human experience and perpetuate the hope of a Biblical Civilization. Thus, Noah was to be the one to bring the knowledge and experience from the Edenic period into a new phase for humanity. The Biblical Civilization was to survive with God's adjustment to reach the original goals. Hope is the vision of those who see answers to impossible dilemmas. Hope is one of the few good things common to humanity when there is despair and discouragement. "There were giants in the earth in those days; and also after that when the sons of



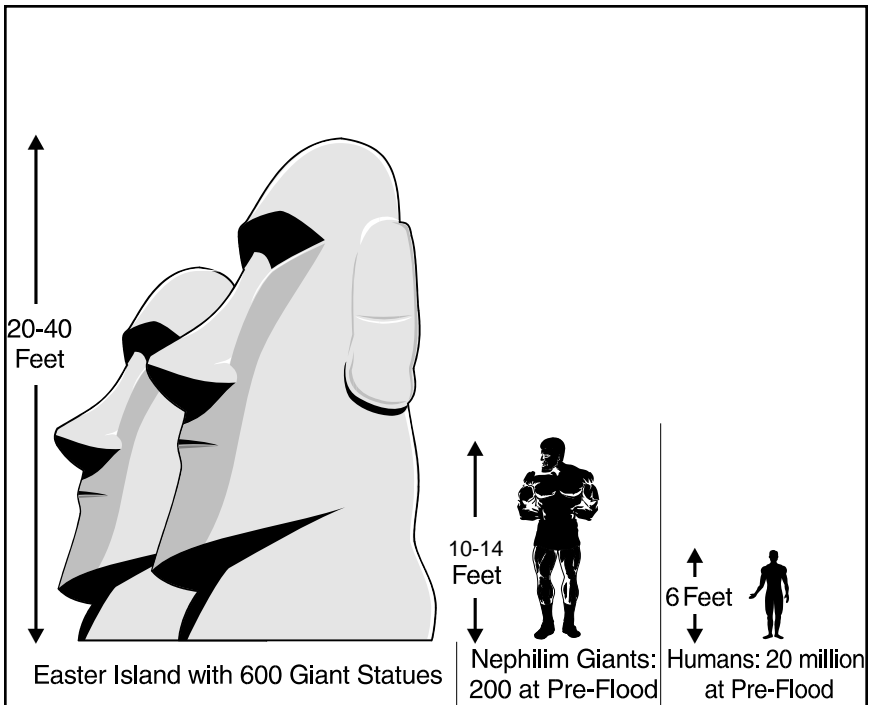


Figure 28 - Comparative Heights - Pre-flood Era

God (angels) came in unto the daughters of men, and they bore children to them, the same mighty men, which were of old, men of renown.” (Gen 6:4) See Figure 28.

Eric Von Daniken raised important questions about the ruins, excavations and objects of the past, which cannot by any stretch of the imagination be explained by conventional archaeology, anthropology and history. How could gigantic statues 20 and 40 feet high weighing as much as 50 tons, be located on Easter Island some 2,400 miles off the coast of Chile? Primitive tools of the past were not able to carve these colossal figures from steel-hard volcanic stone. Who did this work which required strength and thought not common to the civilization of the time? In the quarry of these stones, it appeared the work of these images suddenly stopped as if some great catastrophe had occurred. What about the ruins in the jungles of Guatemala and Yucatan and the pyramid of Cholula, 60 miles south of the Mexican capital? The people of this civilization had a calendar whose accuracy was advanced for its time. Their edifices bear resemblance with

the colossal pyramids of Egypt. The Mexican pyramids are not true pyramids as they lack the proper pyramidal angles. What about the monumental stones of Stonehenge in England, which appear to be carefully arranged into a circular astronomical observatory? These huge boulders each weighing up to 50 tons were transported to this site on the Salisbury Plain. Stonehenge was built about 2000 BC. Archaeologists do not see how prehistoric Brits could have moved these huge and heavy 50-ton megaliths. If they could not, how did these stones arrive at this site? What compelling force spent many years virtually moving mountains and why suddenly was the project abandoned?

The Bible offers an explanation to these ancient mysteries. This explanation appears to be uniquely plausible. It, however, uses a different language and description than Von Daniken. According to Genesis, there was a time when population was expanding considerably. Sons of God that could be considered extraterrestrial came to earth. Julian Huxley in his famous essay entitled, "World Population" which appeared in the Scientific American, March 1956, estimated the world population at that time to be in the vicinity of 20 million people. At that time, the sons of God, which were probably angels, who did not have the capability of reproducing themselves, saw the opportunity to come to earth, materialize, marry human women and reproduce after their kind - half human and half angel. Through this process, the angels planned to create a civilization, which was to be better than any prior one. It was to be the civilization of the Nephilim. But their plan was not approved by God. They became renegade angels. In first book of Enoch, not found in the Bible, their number is estimated to be 200. But Mark 15:13 states at least 2,000 and most likely much more were in existence. This figure cannot be confirmed. It was not uncommon for angels to materialize into human form in those days. God often used angels as messengers between Himself and humans. They appeared as men. (Gen 18) They married any woman they chose since they were intellectually and physically superior to man. There was little resistance to their choice. These materialized angels proceeded for over a period of 700 years to raise a hybrid or mutant race that intended to be better than any other race prior to that time. The Bible calls them

“giants.” They were half human and half angelic. The Septuagint renders the word giants as “Nephilm,” which means giganto or gigantic.

The hybrid nephilms were brutish, sensual, immoral and violent. They were all males. An interesting question is why didn't these angels materialize as females. One possible explanation is they were not able to because of the hierarchy in God's arrangement. Man is one level below angels. Women are two levels below their angelic state. (Psm 8:4-9) Their materialization capability was limited to one level only. Since they left their heavenly home, they are now termed as fallen angels. They were also limited to materialize as animals. When Satan appeared in the Garden of Eden, it was possession and not materialization with the serpent.

The Nephilimites were physically and intellectually superior to the Adamic offspring. This superiority in a negative and immoral way intensified the degraded condition of the fallen human race. The Nephilimites consequently proceeded to take control over earth's affairs and even suppressed the direction of God's sponsored Biblical Civilization. The story of the Nephilimites is, at best, bizarre. It is no wonder people, in general, would refute it. But the Bible does give this inference when heavenly beings, angelic in nature, came to earth, assumed human form, had offspring called Nephilms, which conducted a reign of terror and universal corruption. Instead of improving the human condition, it did the opposite.

Thus evil and immorality were the practice of the Nephilms. The civilization before the flood could literally be called “the civilization of the extraterrestrial beings.” These beings literally oppressed an inferior race. Von Daniken was not too far off when he described this ancient period and activity as “the Chariots of the Gods.” As evil waxed worse and worse and the new emerging Nephilimic Civilization became wholly corrupt, God made a decision to destroy this civilization through a huge deluge and a flood. It was to be the destruction of all flesh under the sky, which had the breath of life. Noah and his family were singled out along with selected animals from the Adamic stock to continue the Biblical Civilization. The account of the extraterrestrial beings gone wayward with the human family helps us understand why God decreed the

deluge. It was to wipe and erase an immoral and corrupt civilization. The unexpected arrival of the flood explains why the ruins, statues and construction projects were in a state of progression when suddenly they were abruptly left as there were.

The Nephilm episode was an example to change the original design, format and process of human origination. Changes can cause serious problems, as was the case of angels who decided to materialize and marry human females. These fallen angels with their Nephilm offspring experimented, genetically with plants and animals. The scriptures prohibit changing what is formed by God, until he permits it. “Now therefore, if ye will obey my voice indeed, and keep my covenant, then ye shall be a peculiar treasure unto me above all people; for all the earth is mine.” (Ex 19:5) The Nephilm is an example of the result that happens when there is a deviation from God’s design. This makes a strong case for begettal humans. Ten reasons can be identified, which give begettal humans superiority in God’s design over cloned humans. See Figure 29.

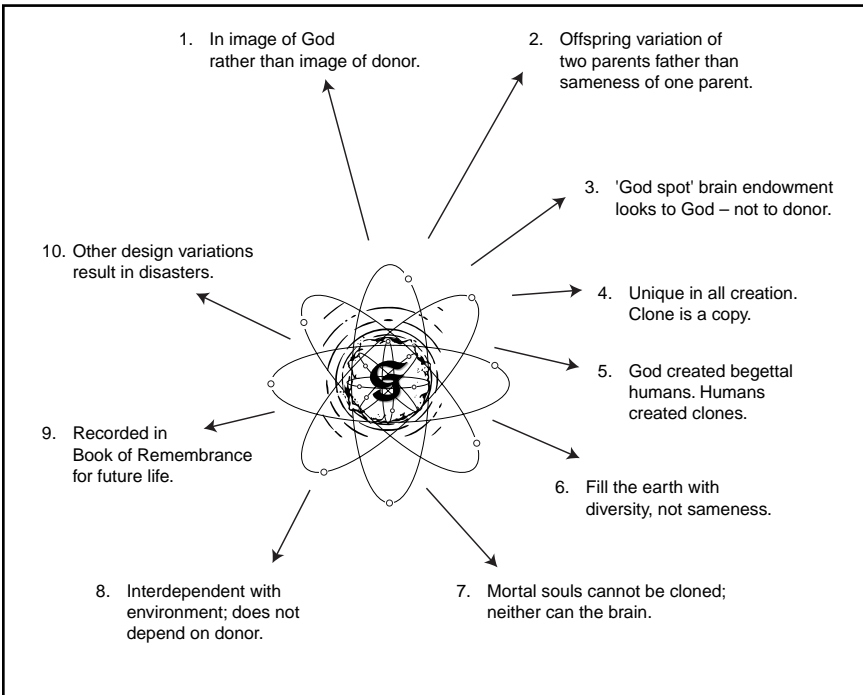


Figure 29 - Ten Reasons Why Begettal Humans Are Granted Superiority In God's Design

## *Playing God*

*“Howbeit then, when ye knew not God, ye did service unto them which by nature are no gods.” (Gal 4:8)*

WHAT ARE THE SACRED THINGS OF LIFE? Marriage vows to become one flesh are sacred since they are made in the presence of God. Conforming to the Ten Commandments is sacred since the commandments are the righteousness of the law and God expects obedience. (Ro 8:4) Loving God and your neighbor is sacred since this is how people can be perfected in God. (1 Jn 2:5) Searching, studying and conforming to scriptures are sacred for in them one can find eternal life. (Jn 5:39) Is the DNA with its individualized genetic code sacred as a product of Divine Creation? Are our genes put there to be manipulated? If so, do we have the permission or right of God to manipulate the DNA to redesign the very essence of human nature? If we did manipulate the DNA would we be our own creators? Would we be playing God? See Figure 30. Is it a gross sin to play God when in fact, we are not God?

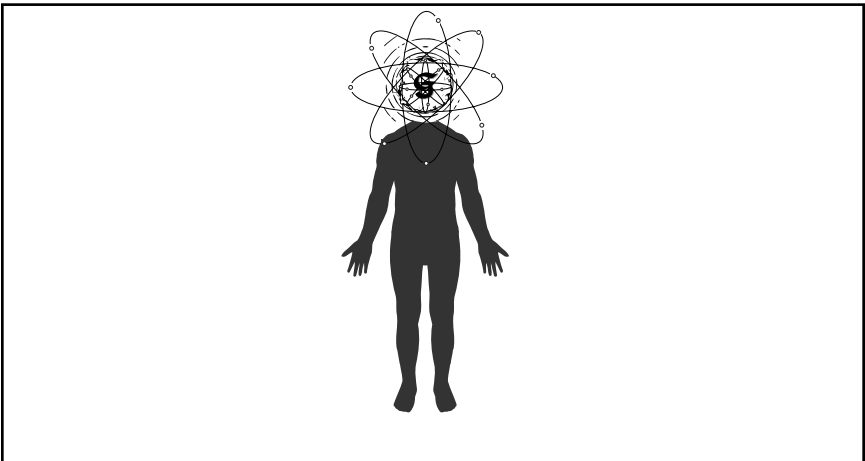


Figure 30 - Will Scientists Play God?

There are profound moral and ethical questions to be answered. To accuse someone of playing God is to find evidence that he has exceeded God's limits in God's design of life. It is to accuse someone and even condemn him for an unauthorized, human intervention into the processes that have been divinely ordained. It is to accuse someone of making decisions to change God's design and infer that God's design is inferior. It implies placing one's self into a position where God belongs and only God belongs. Playing God should not be leveled only at scientists or doctors. It can apply to any individual, groups of individuals or organizations who reach a limit of God's design and deliberately proceed to exceed it. For example, generals at war or corporations with products that are killing masses of people can likewise play God if their work kills people. Applied to genetic therapy, playing God can be very serious since genetic manipulations can be passed on to future generations.

#### WHAT DOES IT MEAN, PLAYING GOD?

One of the major goals that God wants humans to achieve is to be in His image and likeness and not in the image and likeness of sinful humans. (Gen 1:26)

There are several behaviors that can identify that define "playing God." See Figure 31.

1. Deviating from God's secrets of life for other purposes!

Scientists, technologists and researchers are learning much about God's awesome secrets. It seems God is permitting these revelations for lessons of experience. Mysteries are being revealed more now than ever before. To know how to reach into ourselves to remove or add genes, or correct or replace them is an awesome power. Does God want scientists to have that power or are scientists taking it anyway? On the other hand, doing what God wants is not playing God, but accepting His mandate and acting as His agent.

2. Having the power over life and death.

Emergency surgery that delays or denies death may seem as if physicians have taken over the power to deny death and enhance life. But unless the patient or the victim imputed the right to medical doctors to perform certain procedures, this would not happen. Hospitals,

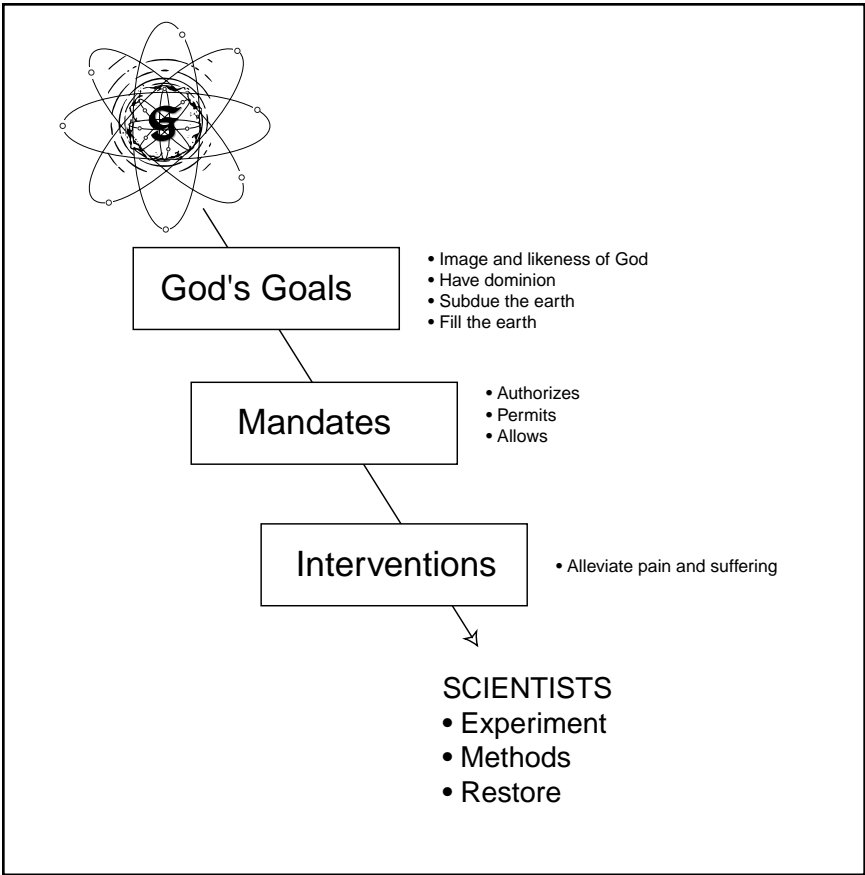


Figure 31 - Reducing Human Suffering Is a Compelling Expectation of Humans

medical facilities and health practicing practitioners are licensed to perform lifesaving procedures by authorization and sanction of the culture, society and potential patients. Decisions regarding life and death ultimately belong to God.

### 3. Changing human nature from an original design.

Human cloning was not an original design of God. Therefore, a human clone will come to behave in a different manner from an original human nature. After all, begettal humans have inherited both male and female characteristics. Whereas cloned humans inherit only one set of characteristics, male or female. Is altering human genes the will of God? Playing God would mean substituting for God in determining what human nature will be.

It seems to this author that God should be playing God while humans should be playing humans. The roles should neither be mixed nor interchanged.

God is attempting to achieve extraordinary goals. In His fourth goal especially, God expects humankind to develop an image and likeness of Himself. All throughout history, God made adjustments to implement His plan. Adam was driven from Eden to gain the experience of sin and evil. The Flood was allowed to indicate to civilizations that deviations from moral law would only be allowed for a short time. God used Moses to deliver His people, but Moses was not allowed to enjoy the victory of being in the Promised Land. Nebuchadnezzar was brought to bear on Israel, which included the destruction of the temple. This gave lessons to Israel. Glorious Israel was split after Solomon's reign in order to preserve a remnant to fulfill the Abrahamic promise. Daniel was exiled to Babylon to give a prophetic promise of the coming of the King of Israel. This information and influence sent the magi looking for the babe in a manger. Paul was redirected from persecuting Christians to directing them into a great Christian movement. The reformation was the method used by God to bring His people out of a rejected organization. God used science to save the world from the black plague in the Middle Ages by leading them to the concept of quarantine, a medical practice used in the Bible. Hitler was applied to the Jewish question of existence and, unknown to him; he helped the Jews re-gather to Israel to form a new state and a new restoration. When the progress of the new state of Israel was threatened, God utilized the Zionists and the new Israelis to win several wars.

The next section compares and contrasts cloning with one sex donor and begettal with two opposite sex donors. The advantages and disadvantages between God's design and the cloning design are quite obvious. See Figure 32.

Scientists cannot create the basic unit of life - the gene. They can add, subtract, adjust, modify, alter, cause variations, mutations and permutations. But scientists cannot originate a simple gene.

God can and has created the gene - the basic unit of life. He can add, subtract, adjust, modify, alter and make changes with the gene. God can originate more genes and can remove them. God favors sci-



## HOW WOULD YOU DECIDE?

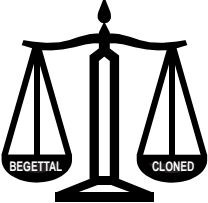


| <br><b>Factors of Comparison</b>   | <b>Begettal Humans</b><br><br><b>The Potential Benefits</b>  | <b>Cloned Humans</b><br><br><b>The Potential Harm</b>   |
|---|---|--|
| <ol style="list-style-type: none"> <li>1. Personality</li> <li>2. Brain Performance</li> <li>3. Age</li> <li>4. Aging</li> <li>5. Immune System</li> <li>6. Variance</li> <li>7. Reproduction</li> <li>8. Sexuality</li> <li>9. Offspring</li> <li>10. Offspring Assurance</li> <li>11. Neurological Senses</li> <li>12. Probability of Birth</li> <li>13. Transplantation</li> <li>14. Continuity of Reproduction</li> <li>15. Reliability of Offspring Birth</li> <li>16. Generations</li> <li>17. Citizenship</li> </ol> | <ol style="list-style-type: none"> <li>1. Unique and Individual</li> <li>2. Composite of Progenitors</li> <li>3. Same as Calender</li> <li>4. Same as Calender</li> <li>5. Strong and Able</li> <li>6. Diverse like Universe</li> <li>7. Normal</li> <li>8. Intense &amp; Family Supportive</li> <li>9. Perpetual &amp; Normal</li> <li>10. Safe &amp; Harmless*</li> <li>11. Many &amp; Active</li> <li>12. Women have 400 eggs<br/>Men have 4 million sperm</li> <li>13. Need Matching &amp; Compatibility</li> <li>14. Begettal Continuous</li> <li>15. High Expectation</li> <li>16. Infinite Number</li> <li>17. 1st Class Citizens</li> </ol> | <ol style="list-style-type: none"> <li>1. Poor Duplicate Copy</li> <li>2. Limited to Donor</li> <li>3. Older and Aged</li> <li>4. Faster</li> <li>5. Weak and Unable</li> <li>6. Sameness</li> <li>7. Lessened</li> <li>8. Lessened Sexuality</li> <li>9. Lessened and Deformed</li> <li>10. Risky &amp; Dangerous</li> <li>11. Extremely Limited</li> <li>12. Search, Risky,<br/>Experimental</li> <li>13. Need Matching &amp; Compatibility</li> <li>14. Experimental and Low</li> <li>15. Very Low Expectation</li> <li>16. Questionable</li> <li>17. 2nd Class Citizens</li> </ol> |

Figure 32 - Comparing Begettal Humans with Cloned Humans

ence's involvement to help in this process. He gave humans a formal invitation when he said, have dominion; subdue the earth and fill it. (Gen 1:26-28)

This book has entered the controversy of cloning human beings. The contrasts and comparisons of the cloning method with the begettal method describe the arguments for human cloning. Cloning does not outweigh the benefits of originating humans using God's begettal method. DNA parenting is of great risk. God's begettal way is the best process of those affected - particularly children, women, families, parents and the society and culture that are affected. All nations of the world must exert the effort to prevent cloning of human beings and to further the begettal process that God has used to propagate the world.

## *When Does Life Start?*

*“For in him we live, and move and have our being ...” (Acts 17:28)*

LIFE IS COMPLICATED! It is probably the most complicated phenomena on planet earth. It is complicated in its start, development and extinction. Life can exist not only in the absence of consciousness, but also in the absence of any kind of neurological activities. Microbes, fungi, plants, trees and different species have life and abound in the millions. Yet they don't know they are alive. Each of these life units has the ability to use energy for maintaining information and infrastructure. These non-conscious forms of life have the ability to reproduce themselves. Life breeds life. The combination of the start of energy, its vigorous use and the unswerving process of reproduction comes close to a general definition of life. Life, then, is a process resulting from an energy stimulation within a process of stages that results in movement and activity. Our attention here is with human life, its origin and the stages that bring it about.

### OVERVIEW STAGES OF HUMAN LIFE

Life tends to be defined in a specific way by the discipline, which is defining it. Biologists define life as the generation and consumption of energy of a cell uniting with other cells to form tissues and structures. Theologists define life as a product of God's design and processes. Humanists define life as a process at birth. Geneticists define life as a series of specie characteristics such in human beings. Sociologists define life as living in groups with common living habits. Legalists define life as a set of rights under an agreed set of laws enforced by a culture. To integrate all these specific definitional views into a coherent statement with all disciples satisfied would be difficult if not impossible. For this reason, life is complicated!

It appeals to this author that life can be seen as a series of stages

from an origin to an expected purpose and an eventual destiny. If so, ten stages can be seen in the ordering of human life.

#### THE START OF HUMAN LIFE

There are four specific stages, which describe when the human life process begins: a) conceptual life; b) unborn life; c) independent life; and d) conscious life. They are briefly described as follows:

##### Life Stages of Human Life Possible

| <b>Discipline</b>           | <b>Comment</b>                                       |
|-----------------------------|--|
| Theologist                  | Human life has purpose                               |
| Psychologist<br>Sociologist | Individual human has capacity to start life          |
| Theologist                  | Development to babyhood                              |
| Legalist<br>Pediatrician    | Baby severed from mother, child has rights under law |
| Sociologist                 | Complete and fully grown to live on                  |
| Humanist                    | Activation of human spirituality in person           |

a. Conceptual life - (union of sperm and female egg) Humans have a unique beginning, which occurs at the moment of conception. The human life process starts at this time. Henceforth, the other three stages are automatic from this first stage. All four stages are needed to develop a complete human baby. To interrupt any stage is to interrupt the human life process. Life starts, but the baby is not complete until the end of the fourth stage. To interrupt or stop the process at any one of the stages is to interrupt and destroy the process. It is clear that interruption or destruction of any stage of the four-stage process is an act of abortion. Abortion is, therefore, the destruction of the human life process once it has started. The four-stage process is well integrated so that human life finally emerges as a conscious life, but had its start in the conceptual life. Thus, an unborn fetus is something far more than a tissue. It has great value because it starts the

human life process. God has stated that anyone who interrupts the human life process would be called to account for injury to an unborn child. (Ex 21:22-23) Human life is sacred, not only after it leaves the womb, but also while inside the womb. The biological processes involved are triggered at different times to start life from conception to birth. The DNA, which is the blueprint of life contains tens of thousands of genes linked into 23 sets of chromosomes and weighs about two ten trillionths of an ounce. The DNA has built within it information for blue printing the type of human structure to be developed. Once fertilized, the DNA finds itself within a receptive environment, the womb. The womb is a specialized structure with built in set of instructions, a placenta, an umbilical cord and the amnion in which organs function naturally and easily to develop the embryo to a full size baby. Conception, formation, gestation, fetal development and birth are descriptions of the process.

b. Unborn life - (the fetus) Once the father's sperm penetrates the mother's egg cell, the fetus begins its formation. Here are the phases of development with approximations of time.

1st day - division of the fertilized egg.

5-9 days - individual burrows into the wall of the womb. Sex can be determined at this early phase.

14 days - Mother's menstrual period suppressed by a hormone produced by the fetus.

15 days - heart is forming, eyes develop.

20 days - foundation of brain and spinal cord are set up.

24 days - heart beats so it can be heard.

28 days - muscles, arms, legs and spine developing.

30 days - blood flowing in veins, separate from mother's blood.

35 days - mouth, ears and nose taking shape.

40 days - heart's output is 20% of adults.

42 days - brain coordinates movement of muscles and organs.

49 days - sensitivity to touch develops.

56 days - heart beats sturdily, stomach produces digestive

juices, liver makes blood cells.

63 days - fingers bend, thumb sucking.

70 days - fetus squints, swallows and frowns.

77 days - fetus urinates, even smiles.

84 days - fetus kicks, makes movements, breathing noted.

91 days - vocal cords forming.

112 days - grasping hands, somersaults.

140 days - mother senses movement.

160 days - hair grows, eyelashes used.

196 days - mother's voice is recognized.

224 days - weight high, quarters get cramped.

255 - 280 days - fetus triggers labor and birth occurs.

During this entire process, the mother's body undergoes a series of changes that adapt it for nourishing and protecting the growing baby.

**Independent life - (birth)** Once the fetus is ready to emerge usually after 280 days or 9 calendar months, the delivery process begins. The muscles of the uterus start to tighten and relax in a rhythmic pattern. As the fetus begins to move, the muscle contractions become stronger and more frequent causing the cervix to open. The contractions gradually force the baby through the cervix and out of the woman's body. Women assist the process by pushing with the abdominal muscles. Fluids surrounding the baby help in the descent. Once the baby emerges, the umbilical cord is cut and the infant starts to breathe on its own. As the baby breathes on its own the umbilical cord is severed. The baby is an independent life separate and distinct from its mother.

**d. Conscious life - (infancy)** Consciousness means a person has an active mental process in which the person experiences feelings, ideas, awareness, desires, wants and the like. The infant knows and is aware of his own being and life as well as the being and life of others. There are degrees of consciousness in the sense of being aware of what is going on in the environment. The infant begins experiencing feelings of "being." The period of this awareness can be between

1 to 3 year old. The content of consciousness includes knowing and remembering father and mother, family, home, comfort, pain, sickness, sleepiness and the like. This represents conscious life in the fourth stage of human life beginnings. See Figure 33.

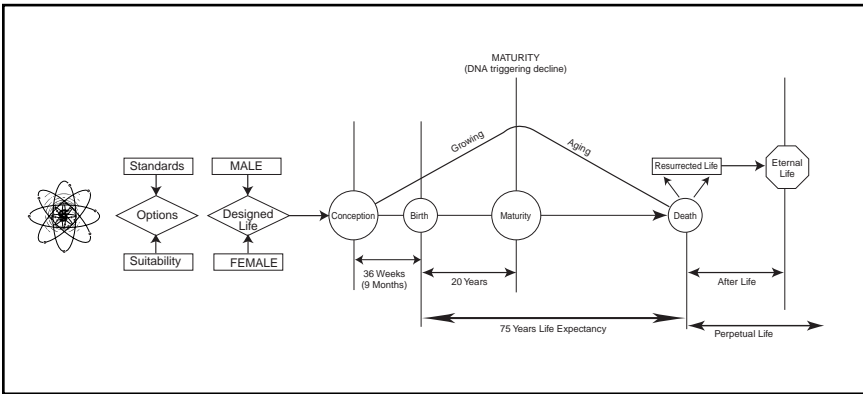


Figure 33 - Overview of The Process Stages of Human Life

**ABORTION: SYMBOLIZES LOW VALUE PLACED ON THE HUMAN LIFE PROCESS**

The phenomena of abortion is worldwide! The annual estimate of abortions is close to 2 million in 32 states of the United States. California has the greatest with over 300,000 in one year only. The rates throughout the world are astonishing. It was communistic and atheistic Russia that was the first government to enact policies in 1920 in support of abortions. Russia has the highest abortion rate in the world exceeding 10 million annually. Generally, one in four pregnancies end in abortion. There are women who have had as many as 30 abortions. As the statistics pile up, many are raising questions as to whether abortion is right or wrong. Is it immoral to have an abortion? Who has the right to choose whether the unborn can live or die? These issues have created a divided world and division among religious groups. Historically, in just 100 years the world has changed from abortions being wrong and unacceptable with minor exceptions to abortions being accepted as a form of birth control and supported by government policies. In China, newly married couples are allowed only one child. Any other pregnancy must be aborted. There is no

choice for the newlyweds. Any other pregnancy will be interrupted by an edict of government. In China the right of government supercedes the right of the parents or the unborn baby.

#### MORAL DEBATE

The Supreme Court in January 1973 voted 7 to 2 (Roe vs. Wade) repealing all anti-abortion laws. It recognized pregnancy in periods of trimesters. Only in the third trimester (20 weeks) is some protection given to the fetus. Additionally, the courts suspended anti-abortion laws and left it up to the states to enact their own laws. Moral debate on abortion ranges from a trivial matter to a most serious matter. The trivial side says - it is an unplanned event. It is inconvenient and even a mistake. The serious side says - it is manslaughter, murder and those responsible will have to give an account to God. Interesting to note, breaking an eagle's egg results in a \$5000 fine, while on the other hand, the government will subsidize the cost of breaking a human female's egg. Government policies will give intensive care in hospitals to save the life of a 3-month-old baby struggling to live, while the same government will practice procedures to destroy a 3-month-old fetus who is struggling to live. The tree of good and evil, if it is anything is a tree of choice. We can choose as Adam did. We have the right to choose. God allows choice in our lives. I have set before you life and death. (Deut 30:19) Choose what you will have. But like the tree of choice, there are consequences connected with the choice that is selected. The time of accountability will come. There are many conflicting and contradictory definitions of the fetus.

1. Fetus is a person at conception. No abortion must be allowed.
2. Fetus is not a person at conception. Abortion allowed up to 20 weeks.
3. Fetus is not a person until birth. Abortion allowed up to 36 weeks (9 months).
4. Fetus as a person grows to maturity up to 20 years.
5. Fetus as a person ages or declines until life expectancy (75 years).

The first argument against abortion is the view that life is in the blood. The scriptures indicate life is in the blood. Here are some examples:

“But the flesh with the life thereof, which is the blood thereof, shall ye not eat. And surely your blood of your lives will I require, whoso sheddeth man’s blood, by man shall his blood be shed.” (Gen 9:4-6)

“The life of the flesh is in the blood: and I have given it to you ... to make atonement for yourselves for it. It is the blood that makes atonement for one’s life.” (Lev 17:11)

“The atoning blood of Jesus, the life is in the blood of Jesus as a ransom for the world. Jesus offered himself for the sins of the people with blood.”

“Thou shall not kill.” (Ex 20:13)

Does a fetus have blood at the point of conception? Is there a fluid operating at such an early stage carrying out cellular transformation? If it does, is it reasonable to say it has life? Medical research tells us the heart of a fetus can be detected 18 days after conception. That is less than 3 weeks. The detected heart pumps blood as a circulating entity bringing nutrition into the blood stream for growth, development and life. From the moment of conception, any further formation of the individual is a matter of time, growth and nourishment. Within 21 days a tiny human being already has eyes, a spinal cord, a nervous system, lungs and intestines. Within 6 weeks, the nervous system, the kidneys, the stomach and the liver begin working. But the important fact is the fetus is pumping blood totally separate from the mother. All this occurs before the mother may even be aware of the new life within her.

In any abortion method, medical people reveal that there is profuse hemorrhaging and flowing of blood by both the mother and the fetus. Blood transfusions for the mother are often required. The life is in the blood. The fetus has blood. It, therefore, has life. “He who sheds man’s blood by man shall his blood be shed.” (Gen 9:6)



The second argument against abortion is the destruction of an identified fetus. This is to say, God does recognize and identify in the womb the new fetus, the forming creature, the developing somebody as an individual, as a notable living person. The identify carries with it a life identification even after delivery. “The Lord called me from the womb. From the body of my mother hath he given me my name.” (Isa 49:1) Also, “For you have weaved me in my mother’s womb. Your eyes (God’s eyes) saw my unformed substance.” (Psm 139:15) “Before I formed thee in the womb, I knew thee in the womb. Before thou comest forth from the womb, I sanctified thee and ordained thee to be a prophet.” (Isa 49:5) Also, “His name is Jesus, named before he was born in the womb.” “He shall be filled with the Holy Spirit even from his mother’s womb.” (Luke 1:15) Interesting to note, a fetus in 12 weeks after conception has a complete set of fingerprints that identifies him from the mother, the father or from any other individual in the world. These fingerprints will not change except for size. At the 12-week stage, the fetus is 3 inches long. This identity has vast implications for the resurrection. If life begins at conception and God acknowledges this new life and gives it identity, then its reasonably possible that the fetus is recorded in the Book of Remembrance for the resurrection.

The third argument against abortion is that life in the womb has activity. Life in the womb exhibits behavior, action and movement. When Elisabeth heard the greetings of Mary, the babe leaped in her womb. The pregnant womb is not a quiet place. It is filled with activities. Ask any pregnant woman, the fetus exhibits behaviors and movements like normal babies. In pre-natal research:

A fetus will respond to cold, light and changes in temperature.

A fetus gets hiccups, sucks its thumb, and has cycles of waking and sleeping.

A fetus responds to its mother’s voice.

A fetus, after 7 weeks has its own brain waves. Brain wave activity has started 1-2 months after conception. Brain waves are often used by legal agencies as a definition of life.

A fetus, after 10 weeks, can squint, swallow and respond to noise.

It appears after 10 weeks, an unborn fetus has basically formed everything a newborn baby has with the exception of size.

The abortion methods are many. There is the suction method, which acts as a vacuum cleaner tearing the fetus into pieces then sucking out the pieces. There is the saline injection method, which is salt poisoning injected into the sac. The fetus breathes the saline solution and dies within 2 hours. There is the hysterectomy method using a knife to surgically destroy the fetus as it struggles to live. Prenatal research reveals when an abortionist knife touches the uterine wall, the embryo recoils in the opposite direction to try to escape a foreign sharpness that invades its comfort. When this happens, the heart rate increases, adrenaline flows and the reaction is just like a new baby.

The fourth argument against abortion is that the fetus is more than just the removal of another part of the mother's body and cannot be removed. The pro-abortionists claim the removal of this part has little relevance to the health and integrity of the mother. The fetus is only a tissue. The fact of the matter is the fetus is not solely a "mother's part." The mother contributes in the ovum 23 chromosomes, but the father contributes in the sperm also 23 chromosomes for a total of 46 chromosomes. Indirectly, grandfathers and grandmothers, great, grandfathers and great, grandmothers, on both sides, contribute the type of genes in the chromosomes to determine the personality and type of human being to be blueprinted. But lastly and most importantly, God contributes the reproduction process, which He builds into the fetus so that when it matures it can reproduce itself. God contributes the continuity of life and the life principal through the reproduction cycle that perpetuates generation to generation. Conception, embryo, fetus, baby, child, adolescent, adult and reproduction - there is no discontinuity among the phases. A "mother's part" (a part is meant by those who regard a fetus as non-human) can never reproduce itself, nor can it start another human being. A "mother's part" does not carry the life force, or the life principle, or the life continuity. But a human fetus can. Two direct sources and many indirect sources along with God's reproduction cycle are required to form a human fetus. The decision to abort a fetus does not belong to the mother alone. The fertilized egg is genetically, biologi-

cally, humanly and intrinsically different than the mother. The fetus has a separate life force and therefore, its own right to live.

The fifth argument against abortion are the rights of a fetus. Pro-abortionists claim only the mother has the right. What happened to the father's rights? What about the grandparent's rights? We've just recognized both contributed so that the fetus is neither the mother nor the father, but a different third person with separate individuality collected from the reproduction process. This third person is God. What happened to His rights? God said, "All living souls are mine; as the soul of the father, as also the soul of the son is mine." (Ezek 18:4) This scripture says only God has the right to stop the life processes once it begins. No one else has this right. A couple may prevent life with birth control, but once life starts, God's process must take their course.

Note some of the reasons that have been given for removing unwanted fetuses:

Economic burden

Fear of deformed child

Results of extra-marital sex

Incest/rape

Inconvenience for careers, travel or social activities

Threat to mother's health

Sexual mistake

Hate of children

Too young to have children

To some these reasons are willful and some are unwillful! The willful ones are of great concern because abortion is a willful deed. Some formal definitions are needed at this point.

**Abortion:** pre-meditated expulsion of an embryo or fetus that is not normally able to live outside a womb. It is the willful and deliberate induced destruction of a fetus to prevent the birth of an unwanted child.

**Miscarriage:** Unexpected, spontaneous or un-premeditated expulsion of a fetus before it arrives at a viable moment of birth as a

human baby. It is an unwillful and non-deliberate accident from some internal defect in the pregnancy process or from some external cause. The important words in these definitions are willful and unwillful. Willful acts carry responsibility and accountabilities.

Every one of us shall give an account of himself to God.

Everyone shall account for every idle word.

For if we sin willfully, after receiving the knowledge of the truth, there remains no sacrifice for sins.

Miscarriage of a fetus are relieved from responsibility and accountability with only a fine. This is because it is an unwillful expulsion of a fetus. But if the miscarriage is a serious injury, than the law comes into effect, “a life for a life, eye for an eye, tooth for a tooth, a wound for a wound and a bruise for a bruise.” (Deut 19:21)

The statistics of abortions reveal that one-third of abortions are obtained by teenagers, and another one-third are obtained by unmarried women. This statistic shows that two-thirds of the unwanted embryos are from fornication and adultery. Abortions have apparently become the practice for covering up pre-marital sex. Since fornication and adultery are sins, to abort a fetus as a result of these sinful acts only results in double sins of the highest immorality before God. There was a time when the greatest enemy of the unborn was disease and starvation. Today the greatest enemy of the unborn is the mother who doesn't want the baby and the father who just stands by and watches. A summary of the reasons against abortions - a scriptural view - is as follows:

Life is in the blood - (Lev 17:11) The fetus has blood, therefore, the fetus has life.

Life is identified in the womb - (Isa 49:1) God identified individuals in the womb including Jesus in his pre-birth within the womb of Mary. (Luke 1:31) Fingerprints and genetic complement of fetus are separate from his mother's and father's. A fetus life is separate and individualized.

Life is activity in the womb - (Luke 1:44) The fetus moves, acts, thinks and reacts like a human baby. A fetus life is in a process of growth.

Life is a continuity with the life principle - (Gen 1:26-27) The fetus is part of the reproduction process from generation to generation. The fetus has a life force from God to reproduce its kind. Only God has the authority to interrupt this life cycle.

Life rights belongs to God - (Ez 18:4) The fetus is a contribution of mother, father, genetic inheritance and God's life process. Therefore, the fetus has the right and opportunity to continue life to its fullest. No one else has the right to stop it except God.

“Behold, all souls are mine; as the soul of the father, so also the soul of the son is mine: the soul that sinneth, it shall die.” (Ez 18:4) This is saying only God has the right to stop the life process once it begins. No one else has that right!

## *Reflections On Life's Questions*

*“In hope of eternal life, which God, that cannot lie, promised before the world began.” (Titus 1:2)*

THE CONCEPT OF HUMAN LIFE is enormously difficult and mysterious. Some see it as an event, which happens when certain elements are present. Some see it as nutriment energy both stored and utilized. Some see it as a combination of the flesh and the soul. Still others see it as physical and biological systems operating in a unity. See Figure 34. The search for a meaningful definition continues. But life in the beginning of its design was a chemical combination. The human body is known to have major and minor traces of 23 different minerals found in the dust of the earth. As these chemical combinations unite into structures, systems emerge. The structures and systems are dynamic. That is, they start and stop at different times for different reasons. For example, the passage from life to death involves the successive stoppage of a great number of biological processes. Similarly, the same may be said for the time when life begins. It involves a great number of biological processes, each triggered at different times to start life from conception to birth. This suggests they are the same processes. At early stages, they start and enhance life. At later stages, the same processes decline and diminish life. But what is the force that triggers and moves the process along? This force is like genetic triggering that switches the processes from positive to negative aging. The DNA, which is the basic unit of life, contains tens of thousands of genes linked into 23 sets of chromosomes, which are a combination of 23 maternal and 23 paternal chromosomes in the fertilized egg, which is about ten trillionths of an ounce in size. This DNA has built within it information for blue printing the type of human structure to be developed. Once the egg is fertilized, the DNA finds itself within a receptive environment - the womb. The womb is a specialized structure with a placenta, an umbilical cord and the

amion in which organs function naturally and easily to develop the embryo to a full size baby. Conception, formation, gestation, fetal development and birth are stages in the process definition of the start of life. The big mystery of life is the force that triggers these stages once conception is instituted. It is a force that pushes the stages along to bring life into existence. Is it a randomized program built into the DNA? Is it an electrical scheduling package passed on by progenitors to offspring? Since it is automatic and choice is not an option, is it part of a design originally incorporated into the genetic package passed on from generation to generation? Or was it altered after the design was completed? The Bible claims it was altered later when the human couple fell in non-conformance to established laws. To interrupt the automated process of life is to interrupt God's design, even through abortion. The force of design is destroyed. It is because of this unknown force that we see life as more than the sum of the countless physical and chemical reactions occurring in every part of a human life. Every part behaves as a part, but when constituted as a whole, the whole causes the parts to behave beyond its limits. Truly, life is more than the sum of its parts. This mystery is enhanced as humans are designed and prepared to live a never-ending existence, but for some uncontrolled reason it stops. To consider another example, the brain is designed to hold 100 billion cells; linked by 100 trillion synaptic connections, which are focused into an individual cable called the optic nerve. This nerve is connected to the retina of the human eye which it alone has three million cells. The human eye is capable of taking in unlimited pictures and words. With the brain, it can analyze and store unlimited information. The brain is able to build on previous information. Animals do not have this capacity.

When one thinks the human body contains more than ten trillion cells, one easily concludes the human is the most complicated entity in the universe. Still another example is cell renewal in the body. Cells are continually replaced when needed. New cells are formed to take the place of old ones. The internal structures, organs, tissues, glands and systems are so automated that they can go on-and-on. There seems to be absolutely no limit to the potentiality of continuous and uninterrupted life. That's where the mystery comes in. Humans are designed to continue indefinitely, but something triggers

the human systems into a state of decline. Life comes to an end. Life, then, is a process curve like the parabola of a projectile. See Figure 34.

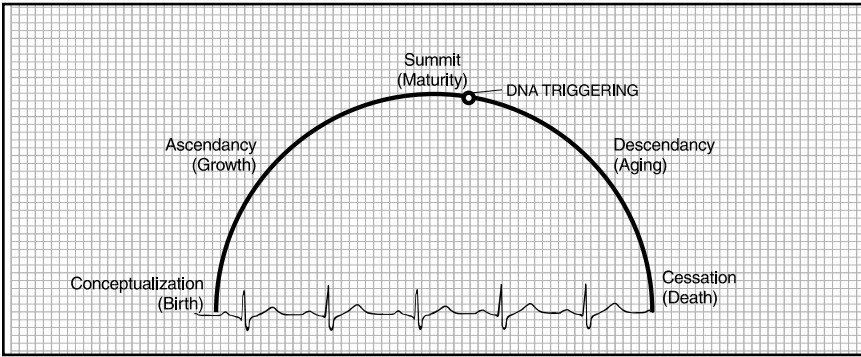


Figure 34 - The Present Curve of Life

Life is conceptualized at the initial state (birth), ascends, peaks, reaches a summit (maturity), then declines and descends to a stage of repose (death). To travel on the curve of life is to experience growth, maturity and decline. The curve of life is under a limited time span. In the future, the two ends of the parabolic curve will be tied together to form a perfect circle. Under this perfect condition, one cannot find, as in a circle, the start nor the finish. Human life will not intensify, nor peak, nor diminish, but remain steady, consistent, reliable and never-ending. The mystery of the future and the mystery of the past are both locked and united in the curve of life.

The human body with all its specific capabilities helps define human life. The eyes, even though they blink 15 times per minute enable the body to see and react to the world around. The eyes can distinguish among more than 300,000 different color variations. The eyes can see a small candle flame from 30 miles away on a clear, dark night. How emotions and the eyes are connected so that they tear during crying still remains a mystery. The ears work in pairs, to collect sound vibrations and turn them into signals to the brain. Ears can detect 1500 different tones and 350 degrees of loudness. They can sense the direction of sound based on a .00004 second difference in its arrival from one ear to another. The nose can distinguish between 2,000 and 4,000 different smells. There are specialized



nerve endings called receptors at the back of the nose, which are extremely sensitive to chemicals in the air stream so that one drop of diffused perfume can be detected in a large house. The brain can become accustomed to smells, even the most horrible ones. The brain simply switches off the smells. The tongue, which extends outward approximately 4 inches long, has over 1,000 taste buds so that .04 ounces of salt dissolved in 500 quarts of water can be detected. Taste buds work only when saliva dissolves chemicals in food as it rolls over the buds. The skin is a marvelous organ. It is the largest organ of the body with thousands of nerve cells. These nerve cells respond to touch, heat and pain. They can feel the weight of a mosquito landing on the skin. In most places, the skin's thickness is only 0.08 inches, but it protects internal organs from injury and infection. The brain is the major organ of the body. It is the control system of all parts of the body automated and non-automated. It is responsible for thought, memory, language and emotion. In a typical adult it weighs 3 pounds and contains 100 billion cells. Roughly 2 pints of blood travels through the brain every minute. The total number of brain cells is not fixed at birth. Cells are not regenerated. The best of efforts can only retain what was received at birth. A strong alcoholic drink or drug dosage can destroy as much as 600 million cells. Alcoholics and drug addicts have seriously failing memories. The heart is a fist-sized muscular pump that pushes blood around the body through 172,000 circuits whose combined length is 60,000 miles of blood vessels. This pump circulates 875,000 gallons of blood annually. The human consists of seven basic systems: the respiratory system; the digestive system; the skeletal system; the circulatory system; the muscular system; the nervous system and the skin system. Each of these systems has countless parts, but each part is needed in the body. Parts are interrelated and interdependent. Parts operate as a totality. Disturbance of one part affects all. The human body with its myriad of functions and parts is truly amazing and astonishing. See Figure 35.

Valerie Fahey provided a fascinating look into the results of the functions of the body by aggregating totals for an individual in a lifetime. The number of sperm produced by a male is 400,000,000,000. For a female, it's approximately 400 eggs. The number of heartbeats

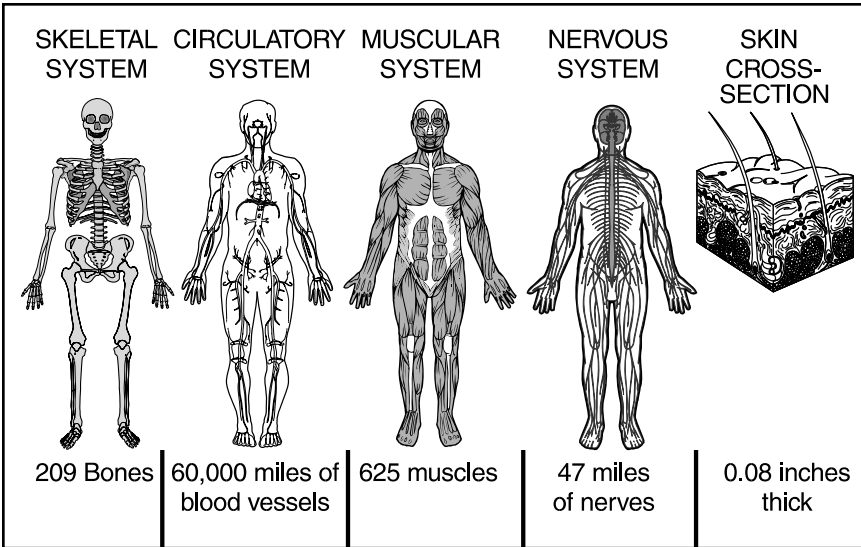


Figure 35 - The Body Systems

in a lifetime is 2,500,000,000 times. The number of breaths from the lungs is 740,000,000. The number of quarts of blood pumped by the heart in a lifetime is 350,000,000. The eye blinks is 333,000,000. Finger flexes is 25,000,000. The average number of laughs in a lifetime is 540,000. The hours of sleep are 202,300, which also includes 127,500 dreams or nightmares. 40,520 quarts of urine are produced by an individual. There may be as much as 3,000 cries, 350 miles of hair and 60 feet of fingernails. Again, the human body with its myriad of functions and parts is truly amazing and astonishing.

Over the years, science, medicine and technology have raised the statistical life expectancy, but the longevity or span of life has not changed. The scriptural account (Gen 6:3) specifies the limit of life to be 120 years. There may be a few unique individuals who have surpassed this, but not by much. The greater majority continues to live within this limit. Life expectancy is a statistical average of the number of years between birth and death of a large population. It is the time between an individual's position on the curve of life to a predicted date of death. Life expectancy has been increasing. Approximations can be as follows: In ancient Greece and Rome, 20 years was the estimated life expectancy; In Medieval Europe, it was 30 years; In the United States in the mid-nineteenth century it rose

to 40 years; Again in 1900, it rose to 50; Today, it has arrived at 77 years. Forecasters have estimated that in the next 50 years, life expectancy will rise to 80 to 100 years. More will be described on life expectancy in a later section of this book. The Bible claims life expectancy could be forever when critical conditions have been restored to humankind. Life expectancy is affected by a variety of controllable and non-controllable factors. The controllable ones have given humans an upward trend. The non-controllable ones limit humans to the 120-year span.

The loss of life's continuity prompts a search to restore this continuity. People sense somehow they are disconnected with something vital, something crucial to life's continuity. They seem to be in a meaningless cycle of birth-death with no hope for change. This is like the ancient Greek mythological figure Sisyphus who was condemned by the gods to roll a stone to the top of a hill, then to allow the stone to roll back to the bottom of the hill, then to roll the stone up the hill, and then to allow it to roll down again, and so on, again and again, forever. This is a picture of a pointless, meaningless cycle of existence. Sisyphus would have loved to see this meaningless cycle to cease. If the Genesis account reveals anything, it reveals a disconnection with God, which has resulted in this meaningless cycle of life and death. God said if you choose evil, you will enter this life-death cycle. Conversely, if you choose good, you will break this life-death cycle. Choosing good is the great choice and an opportunity to enter a new cycle of life-life. Choosing good reconciles and reconnects the person with God. When this reconciliation occurs fully and completely, continuity of life will also occur. This, then, is the mission of the Biblical Civilization. Life has been removed because of a disconnection with God. The Biblical Civilization with its full practice of good and its avoidance of evil will result in a reconnection. To make a comparison with our mythical character Sisyphus, the Biblical Civilization will give him the strength and the perseverance to roll the stone over the top to the other side of the hill and away permanently.

#### INTERDEPENDENT ELEMENTS OF THE UNIVERSE

How do we relate to others and to things around us? How do we

fit in to an overall context? Why are we dependent on so many things to sustain life? A purposeful universe suggests the endless variety of elements on earth, as well as in the cosmos, have an interactive and interdependent relationship. Everything is held together in a hierarchical order by levels and interrelated functions. Nutrient soil cannot function without rain and temperature. Plants cannot live without soil that feeds them. Animals and humans cannot live without the plants. All, in turn, are nourished by the sun. Planets cannot exist alone. They revolve about their stars. Stars are part of the orbiting solar systems. Solar systems are held in place by the galaxies. All, in turn, depend on their central black holes, which restore their energies and perpetuate their existence. All in the world and the cosmos are dependent on others in one way or another. One cannot exist apart from the other. Everyone serves everyone. Everything depends on everything. (Gal 5:13) God has made no one absolute. Dependence is a perpetual call. It has been ordered that humans are in need of each other. This is one reason why humans must learn to love each other since their existence is vitally dependent on others. This vast interdependence serves a hierarchy up to the highest level. Going up the hierarchy means going up in complexity. Going down the hierarchy means going down to simplicity.

#### THE NEEDS OF HUMAN LIFE

Most religions seem to embrace five concepts:

1. Life needs God. This acknowledges there stands in the midst of everything a being, which gives and sustains life. He is spiritual. He is one God.

2. Life needs value because life is worth living. In spite of the difficulties and problems humans have in the conduct of life, life is an experience well worth the effort to continue it.

3. Life needs love and understanding. Humans depend on other humans as they do food, water, sunshine, comfort and rest. Love is the “glue” that gives us unity.

4. Life needs learning. If experience is the greatest teacher, the greatest lesson is to learn from experience so that a second time around, perfection can be reached.

5. Life needs continuity. Most everyone enjoys living life and will pursue any and all avenues, which may perpetuate it here on earth or in heaven.

The influence of these five principles has been profound and represents important commonalities among many religions. Yet there are secondary needs that support the eight primary ones. This is seen in Figure 36. God has a plan for supplying these needs. In fact, every human life from it's beginning to it's reconciliation to God is a plan of God.

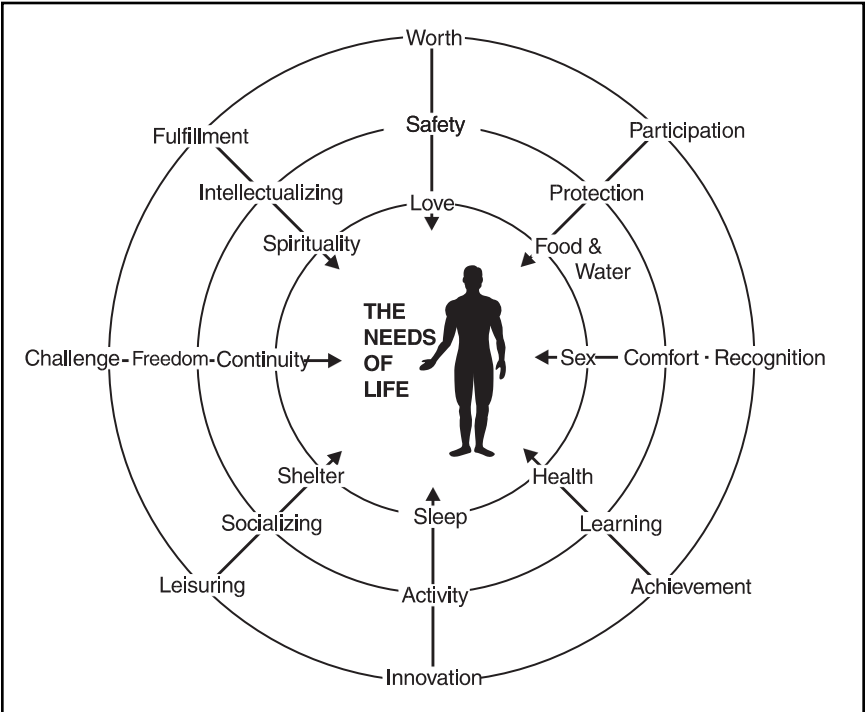


Figure 36 - The Needs of Life on Three Levels: Primary, Secondary and Tertiary

This book focused on human cloning. A human clone has not arrived at this writing. The author's concern has been described and emphasized. But human cloning involves the issues of life and death especially with the continuity of life and the delay or elimination of death. We still continue to ask questions, searching questions. Who are we? What is our identity? How does identity come about? How can we extend life? How can we minimize pain, suffering and dis-

comfort? What differentiates us from other creatures? The Bible claims humans are designed and developed one level below spiritual angels and one level above animal species. (Psm 8:3-6) The nature of humans is a special design different from the animals in many respects. In one fundamental respect, humans concern themselves with religion and spiritual matters. In another respect, humans alone can know the past and be able to reflect on the future. In still another, humans have the faculty of differentiating right from wrong. This is the endowment of morality. It is also the endowment of identity. With this endowment, humans can be in the image and likeness of God. This endowment has diminished in the history of humans. Some would like to remove the morality endowment from individuals and give it to the government and legislation. This cannot be done since morality and reverence go together. Reverence is religion, which venerates God and His principles. Morality is religion faced toward the world. This gives individuals identity. The individual must integrate the two. In still another respect, humans have the endowment to reason, to create and to have freedom of choice. Let's briefly look at the answers to the questions that have just been raised.

#### WHO ARE WE?

We are creatures who believe in the existence of God. God exists and He is one. This recognition and belief came about because we have collected evidence beyond our small personal self-knowledge. Reasoning with this evidence draws one, to conclude that God's existence is the most profound fact of the universe. This belief is not simply intellectual knowledge, but a personal experience of knowing God in one's life. The intensity of this belief varies. Most believe, but continue life as a member of the traditional civilization of which they are a part. Still others, although a small group, have a belief that is of such strength that their lives are changed toward the expectations of a new civilization. We are creatures designed and given life by God, creatures who over the centuries, are being developed in the image and likeness of God. Life gives us an opportunity to make choices, which enable us to fulfill this image and likeness of God. Our actions and daily activities, long as they may be or repetitive as they may seem have meaning if they have some significant accumu-

lation and contribution that can be considered to have been in the direction and purpose of God's goal. In summary, a person's identity is defined and shaped by what the person does and the beliefs he holds. Examine a person's activities and beliefs and you will know who he is. One must find out quickly what one must do and proceed to do it. God knows we are mortals and one day will die. Make your contribution as quickly as you can. The search for meaning, therefore, is the search for the contribution that God expects us to make in our short-lived lives.

#### WHAT IS THE MEANING OF LIFE?

The search for the meaning of life is a search for the origin, maintenance and continuity of life. Life is possessed by humans, but it comes to an end without choice. Life's continuity must be a future expectation since it has not existed in the past. All continuity efforts in the past have been a disappointment. Nothing has succeeded to break the involuntary journey toward aging and expiration. The future hope for the continuity of life is to recognize something was lost to disrupt the continuity of the past. Efforts must be made to find what was lost and then to reestablish it. This effort may answer the question "why are we here?" Is the existing, temporary life only an opportunity to find that which was lost? Most efforts today are to add what's possible to the existing life not realizing something is basically wrong with life's roots. There is a sense that this temporary life is a lesson for finding those roots and reestablishing them. Life then means an opportunity to learn and earn for oneself the qualification for entering the ages of eternity. This requires knowing and doing the will of God.

The loss of life's continuity prompts a search to restore this continuity. Humans seem to be in a meaningless cycle of birth to death with little hope for change. If the Genesis account of the Garden of Eden reveals anything, it reveals a disconnection with a vital element, which is crucial to life's continuity. The search for life's continuity summons humankind to return to the source to find what was lost. Meanwhile, the Bible provides three goals to give this present life meaning. The first is to collect as many human experiences and lessons to be used as guidelines for living in the ages to come.

Experience is God's school, learn well! Experience will give people internal guidelines if they utilize their own history. The second goal is to collect as much knowledge and understanding from the light of many lamps. Understanding is an important "sense" for a human being. It is not the eye that sees beauty, nor the ear that hears music, nor the nose, which smells fragrance, nor the tongue, which tastes sweetness. It is rather the mind that understands and relishes the perception of its many parts. The third goal is to make progress for the future. Order and harmony is heaven's first law. Order gives humans the conformity to live at peace with God's universe. When this reconciliation occurs fully and completely, continuity of life will also occur. This process is the search for the meaning of life. It is the search for reconciliation with God.

#### HOW CAN WE PERCEIVE GOD?

What is God like? How can we know him? What is the Biblical view of God? To know God must surely be the ultimate aim of religion. There are many perceptions even with His name. The Muslims have 99 different names for God, but among them all, they do not have "Our Father." God is the hero of the Bible. Everything that is narrated, enjoined or foretold is related to Him. Since most people are convinced of the invisible existence of one God, the question remains how can we know Him in more detail. Many have said, anyone who knows God has discovered Him not because of his ability to conduct research or analysis. It is because God has uncovered himself in such a way to those who want to know Him. God's uncovering is necessary since God cannot be seen directly. He is invisible and will remain invisible to humans.

The Bible claims insights into the nature of God. When we grasp insights and meanings from the Bible that are true and pure, we are collecting perceptions of God. None of these insights incorporate natural or physical features, as humans would have. God has a face or front part. (Matt 18:10) He is spiritual since angels behold his face all the time. If God has a face, he must have other parts. Moses saw His back. (Ex 33:23) God laughs. (Pms 2:4) God gets angry. (Pms 7:11) God hates iniquity. (Pms 5:5) God gets jealous. (Ex 34:14) God can become sad. (Gen 6:6) God is patient. (Ro 8:31) God can create,



reason, innovate, predict and make judgments. God is light. (Is 60:20) God is not like anything on earth except man who is in his mental and moral image. If God exhibits behaviors similar to human beings, it is because man was made in the image and likeness of God.

In the book of Genesis, it states, “in the beginning God created the heavens and the earth.” This is not the beginning of God, but the beginning of his physical and visible works. God has no origin, nor initiation, nor genesis. He has no end or termination. He is from everlasting to everlasting.” (Pms 90:2) His life principle is like a circle without origin or end. Like a perfect circle, try to find where it begins or ends. This is a mind-boggling concept. God is self-existent, self-contained and self-perpetuating. This is not an attempt to define God for God cannot be defined. He can only be encountered. Only a vague perspective can be grasped. God is a spirit, eternal and unchangeable.

Another mind-boggling concept about God is there will never be a change in Gods. God will never end since He is infinite. Grasping the concept of infinity for finite human minds is supremely difficult if not impossible. One way to comprehend the endlessness of infinity is by stating infinity is a number so big that it is bigger than any number one can know. Here are some huge numbers. The number of stars in the universe is ten followed by twenty-two zeros. Infinity as a number is beyond that. The hemoglobin count of red blood cells is ten followed by eighty zeros. Infinity is beyond that. The atoms in the universe are ten followed by six hundred and twenty zeros. Infinity is beyond that. Infinity will also be beyond any new number that is conceptualized in the future. God is beyond infinity. God’s life is without end.

God is a spirit, which cannot be seen with the naked eye. He cannot and should not be described in human parameters. He is not of human substance. Since no one has seen God, there is no idea what God looks like. The anthropomorphic expressions collected from the Bible with reference to human features such as finger, eyes, ears, legs, feet are more symbolic of his nature. God himself has prohibited making any image of him. This is severely forbidden. God must always be distinguished from nature. He is not “mother nature.”

Mother nature is an expression that describes the self-perpetuating physical environment around us with natural laws allocating abundant resources. Mother nature is the product and result of God's creative ability. The only physical parameter that can be assigned to God is light. He is the most powerful light in the universe, suggesting a never-ending source of energy and power. His judgments of law and order are seen by His dealings with His people. His wisdom and power are exhibited in His creative activities and works. His love is exemplified through His plan for the eventual benefit of humankind. God is love. His attributes add up to four: power, justice, wisdom and love. These attributes help humans to perceive God as a being. God is given the name of "the good." It is only by dropping an "o" that good becomes God again. The search for meaning is a search for a better and clearer perception of God and his attributes. The search for meaning is, therefore, the search for a clear perception of God, who He is, where He lives, what His plan is and what He expects of me.

#### WHAT IS THE ORIGIN OF THE UNIVERSE AND HUMAN LIFE?

How did the universe start? Do we live in a designed universe or an arbitrary one? What happened at the beginning? There are three basic views of "how" and "why" the world came into existence. The first view sees the universe, the solar system, the earth and the human family as purposeful. It did not self-originate or self-start. That is, the order, the symmetry and the harmony among enormous diversity follows a purposeful plan with regulating laws directed by a super intelligence. The intricately constructed parts work together for originating and sustaining life. All organisms such as plants and animals depend upon one another and are designed to cooperate for the purpose intended. Everything is interdependent and exists for the good of all. Even the universe is calibrated for life's existence. If gravity were pushed upward a few units, stars would burn out faster. If gravity were pushed downward a few units, stars never would be born. The cosmos and earthly systems are under a sensitive equilibrium. These systems did not come about by coincidence or happenstance. It is a designed plan with regulating, fixed laws to sustain the order of the universe and of life, as we know it.

The “hot big bang” theory supports the concept of a designed universe. The big bang states the universe started by a singular explosion of an extremely hot source of gases which over time became galaxies, black holes, solar systems, stars and planets. This was the beginning of the visible universe. Since the explosion was an effect of necessity, the cause that started the explosion must be greater than the effect. There is a kind of religion in science. It is the religion of a person who believes there is order and harmony in the universe and every event can be explained in a rational way as the product of some previous event. Every effect must have a cause. As Albert Einstein once said, “Scientists are possessed by a sense of universal causation.” This first view of the origin of the universe is compatible with the Bible’s claim that, “Thou Lord, in the beginning hast laid the foundation of the earth; and the heavens are the work of thy hands.” (Pms 102:25)

A second view sees the universe, earth and the human family coming about in an arbitrary and random process, originating itself through a selective evolutionary process. This view states there is no purposeful plan. There is, however, self-organization. Lifeless physical systems that are faced with increasing disruptions will often through self-organization adjust and reform to survive the many causes of the disruption. The freedom to select can bring about prosperity or adversity. Laws of gravitation and conservation of energy are examples of rigid, unchanging processes devoid of any purpose. These laws are not organized for the good of the system nor of humankind. This second view encourages a mechanical explanation of all the phenomena around us. The complex structure of the cosmos developed under a gradual step-by-step series of transformations from simple beginnings to elaborate and more complicated forms. Each successive change is a gradual evolutionary process from predecessors to successors under a cumulative selection. An enormous amount of time is necessary for the constructive evolution to arrive at the advanced state of life, which now exists.

A third view of the origin of the universe is an eclectic view. It selects and combines portions of the first and second views. There is a purposeful plan for the design of the universe and life. Incorporated in this design are unchanging natural laws. The purposeful plan

allows an evolutionary adopting process to move from one design to another. Once the design or species is complete, and “it is good,” the species is fixed. The plan guides movements and activities, steadily and progressively to nurture and sustain life. But it stops short of interfering with the free will of choice. The plan has a future direction by the planner. Certain people or heroes were selected to move humans in an expected direction, but others were allowed to interfere if it was their choice. Thus Noah, Abraham, Moses, David, Jesus and Paul were selected to give the plan its needed direction. But other leaders were permitted freedom of choice, which would work against the plan. Thus, Nebucadnezzar, Alexander, Caesar, Solomon, Genghis Khan, Stalin and Hitler created various forms of cultures and even civilizations that were not in the plan. In fact, they were against it. The third view sees no objection to the process of progressive evolution. Elementary design forms were progressively developed to higher complex stages. The heart and its circulatory system found in frogs are also found in man. The frog is a simple and elementary design. The human is a complex design. One borrows from the other. After arriving at desirable designs, the planner fixes the organism. “In the beginning” suggests the start of the plan, which over the centuries produced a movement. But the movement allowed free choice. Toynbee’s 34 civilizations are manifestations of these many and varied choices. The existence of the plan suggests an intelligence behind the plan. Where there is purpose, there must be a purposer. (Pms 33 and Eph 1:9) The search for meaning is, therefore, the search for how the universe and life were started and what is needed to be done to continue them.

#### WHY IS THERE EVIL?

Why is there suffering and pain in the world? Why is it no one is exempt? Will it always be this way? How does sin fit in? Human life is filled with shortcomings, errors, mistakes, misunderstandings, misconceptions and evils. But these are symptomatic of an imperfect life. The sources of these imperfections may be ignorance, poor development, lack of education or training and even genetic defects. Many of these may be laid at the door of society, culture, parents, teachers, friends and heredity. But sins are different. Sins are seri-

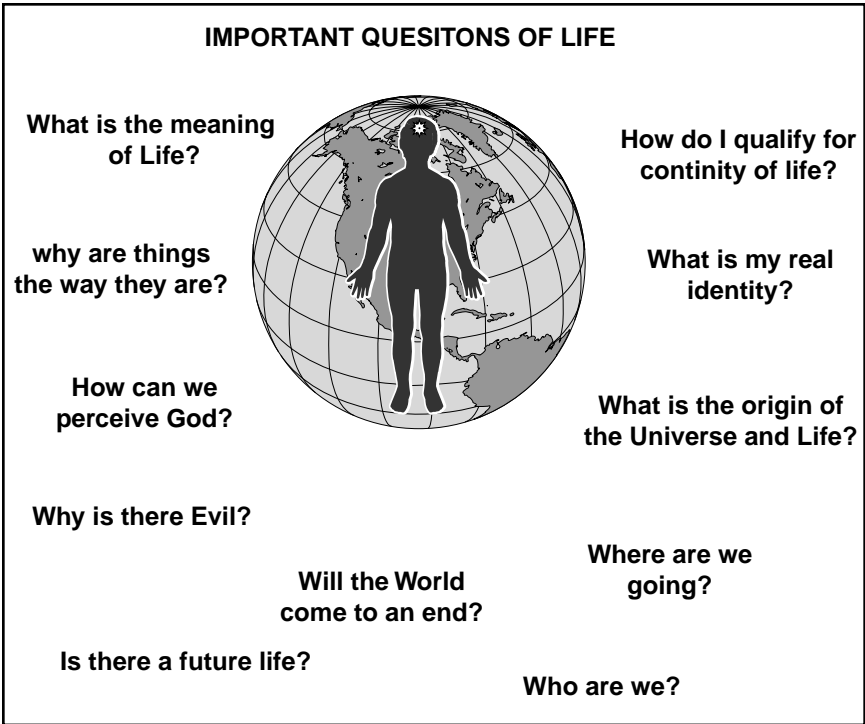


Figure 37 - Raising Questions of Life

ous. Sins are encroachments of Biblical laws and principles. Deliberate sins always imply a certain degree of willfulness in which the sinner commits sins knowingly. Mistakes or shortcomings are not intentional. The intentional sinner goes against God. As it were, the sinner opposes God. The faultier, on the other hand, does not intentionally sin, therefore, does not consciously oppose God. This is the reason why people who unintentionally sin, pray for forgiveness of mistakes and shortcomings. In spite of this difference between shortcomings and sins, evil or misfortunes can emerge from the intentional or unintentional sinners. The Bible describes the fall of Adam and Eve in the Garden of Eden. The effects of the fall were to introduce a legacy of imperfections for all of the human progeny. Aging and death are a part of this legacy. Since both sins and shortcomings are non-conformance to Biblical laws and principles, the results are unwanted evils. Conforming to Biblical principles or moral laws is a definition of perfection. The entire universe as well as the earth oper-

ates under laws. This is how the enormous complexities work in harmony and run like the precision of a Swiss clock. The earth circles the sun at a speed of 67,000 miles per hour in 365 days, 5 hours, 48 minutes and 45.51 seconds. The 6.5 six trillion ton earth maintains this accurate and consistent time schedule year in and year out with strict and rigid conformity. The earth conforms to this law. Suppose someone were allowed to set the speed of the earth to suit his or her personal wishes. If one wanted to delay time, 450 days could be selected for the calendar year. Or if one wished to accelerate time, 200 days could be selected. If the six billion humans that live on this earth were allowed this prerogative, the earth would be in chaos. Order would be disrupted. By setting one speed law for the earth's migration and requiring all humans to adjust to this law, order is maintained. Let's take another example. In the world, a red stoplight for autos means to stop the vehicle. Green means to go. This is true in any country, culture or language. The red stoplight is a human invention, which has become a human law of behavior throughout the world. This produces harmony. Suppose it were different. In the United States the color red meant stop, but in England it was yellow. In France it was blue. In Israel it was orange, etc. There would be confusion and disorder. When everyone follows and conforms to common laws, there is order and harmony, balance and compatibility. When Adam and Eve decided to be in non-conformity with moral laws, disorder was introduced into the universe. The tree of knowledge was really a choice of a pair of alternatives, good or evil. That's why it was called the tree of knowledge. Humans have and continue to learn choice, which leads to great blessings or dreadful evils. When the Bible demands perfection from it's adherents, it is demanding conformance to principle or moral law.

Suffering, which is the result of non-conformity to principles and moral laws has been permitted as a human experience to give people lasting and valuable lessons. Learning through experience has always been the best way to learn. Unfortunately it teaches slowly and at the cost of mistakes. This learning will be useful to the human family in the future life since decision makers will have built in memories reminding them of the consequences of breaking laws. Such natural laws as gravity, changing seasons, digestion and expo-

sure to the sun are inflexible. One must conform to them. Humans must, therefore, adjust to these inflexible laws. If there is failure in this adjustment, evil consequences will result. Similarly, such moral laws, which involve flexible choices such as violence, adultery, prevarication, strife, hatred, drunkenness and murder, can result in evil if the wrong choice is made. Humans must learn from poor choices to avoid the harvest of evil. Humans are now collecting a magnificent body of instructional information and experimental knowledge to develop and maintain a moral sense of knowing right from wrong. The pain and suffering to gain this knowledge is necessary to prepare humankind as moral personalities for the life of the future. Pain and suffering can be seen in a positive way when related to a promising future. As the Bible states, to be made “perfect through sufferings,” (Heb 2:10) humankind is God’s workshop for making perfect men. The search for meaning is the search for the ability to make righteous choices.

#### WHERE ARE WE GOING?

Is history repeating itself? What is the direction of the existing civilization? Is it going in many directions so that any road will take people to their destination? What is the ultimate destiny of humankind? A designed universe suggests there are goals eventually to be reached. The overall goal specified in the Bible is the “kingdom of heaven on earth.” Was this not the basic prayer Jesus taught: “Thy kingdom come. Thy will be done in earth, as it is in heaven.” (Matt 6:10) There are also sub-goals. These can be seen from that which was lost in Eden. Here is a brief list of what was lost in the Garden of Eden with a sub-goal statement of its restoration.

1. An original design objective to develop humans in the image and likeness of the Creator was lost. This design objective needs to be firmly reestablished.

2. The right to life was lost. Hence, there is the need for a process to qualify humans to earn eternal life.

3. Access to the tree of life was prohibited, and therefore, lost. There is the need to reopen the access to the vital and sustaining nutriments of that tree.

4. Equality between the genders was lost. There is the need to restore among humans this equality.

5. A relationship with the Creator was lost. There is the need for a reconciliation process to re-institute this relationship.

6. Heavenly control of earth's affairs was lost. The need to regain earth's control is a must.

7. A paradise was lost where work, leisure and resources reached their highest levels. This paradise needs to be restored.

These seven powerful sub-goals define in a major way the kingdom of God on earth. Quietly and passively, the human race shuffles along the tedious journey in life looking forward to the completion of these sorely needed sub-goals. Somehow, humans know the sub-goals intuitively. Sometimes they can be articulated even if crudely.

Disappointingly, many have raised the question, is life worth living? Is life with its many difficulties and sorrows worth the trouble? Humans have experienced so many disasters that it's no wonder they raise these questions. Those who have a reason for living can survive almost any kind of personal disaster, provided they have an explanation as to "why." It's like saying, those who have the "why" to live can reach almost any goal set before them. A careful reflection on the expectation of the specific goals of the kingdom of heaven on earth, now referred to as the Biblical Civilization, generates a convincing and compelling positive response in humankind as to "why" life is worth living. In spite of the brief number of years one lives, one still looks forward to the time in which life will not come to an end. Eternity is vast and it waits for those whose expectations are visionary. The profoundest meaning of human life lies within the kingdom of heaven on earth and the goals this kingdom expects to accomplish.

Paradise is an exciting prospect. It means unrestricted resources, lots of love, laughter and joyful work. Problems are easily solved and managed. The environment is not in the extremes. It operates for human welfare. There is life and perfect health. Wars and violence are not allowed. Prosperity and happiness is everyone's legacy. Death no longer prevails. Biblical history is a describes the expelling from paradise into an alien land. Restoration is a map out of an alien land back to paradise. History is paradise lost. Restoration is paradise



found. The Biblical Civilization is the process between lost and found. The search for meaning is, therefore, the search for the vision of a restored paradise on earth.

#### WILL THE WORLD COME TO AN END?

Sixty percent of the American population according to a Gallup-poll say the earth with its people will come to an end. Will the 21st century be the doomsday period? Is there a cataclysmic event that will end history, as we know it? Now that we are into the 21st century will that mean the end of life? The Bible does cite prophetic events, which are catastrophic. The term that is often used is Armageddon. (Rev 16:13-16; II Pet 3:6-10; Matt 24:4-51) These prophecies indicate the issues, conflicts and the immoralities will be critical and explosive enough to involve major disruptions in nations and societies. The troublesome problems will be global. Jobs will not provide enough for people to earn a living. Competition in world markets will become economic wars. Budget deficits will be staggering and unsolvable. Family breakdowns will be primary sources of crime, immoralities and violence. Needed resources will be contaminated. Forty percent of the world's water supply is, at this writing, unsafe to drink. Barely fifty percent of all cities in the world have sewage abatement plants. Raw sewage is dumped daily and openly in various waters. 35,000 chemical compounds are polluting wells, rivers, streams, lakes and oceans. Forests are vanishing at the rate of 40 million acres per year. 2000 AD, earth's population reached six billion. Today, most of this aggregate are aggressive discontents due to the conditions of existing civilizations. In the near future the discontents will become radically active in trying to change civilization for the improvement of the quality of human life. The discontents will feel the earth is utterly broken down and something must be done.

In a major article by Jeffrey Sheler in U.S. News and World Report, December 19, 1994, pages 62-71, reports that 61 percent of Americans believe Jesus Christ will return to earth. The remaining percentage is not sure, but are waiting to see if this will happen. This event is known as the second advent of Christ. (Matt Chapter 24) Although Jesus is quoted as saying no one will know the day nor the hour of his return, there is a large percentage of people that agree on

the imminent return of Christ. But there are many controversial views of “how” and “when” he will return. Some say he will return sitting on clouds visible to all of humankind to see. This view stresses his return is to collect his church and to bring judgment to the rest of the world. The collection of his church members is known as the rapture. Another view says he will come as the long awaited Jewish Messiah. This view stresses his return is to re-gather the Jews back to Israel, rebuild the temple and allow the Jews to be the pivotal point of a world renewal. He is expected to return from the east, following the exact route through the Golden Gate of the old city of Jerusalem. Jerusalem will become the capitol of the world. Commensurate with this arrival will be a world conflagration also known as Armageddon. Still another view says he will return invisibly, quietly, but knowingly to gather his church which will become spiritual and judge the nations. This judgment will bring havoc to the nations while Jesus introduces his kingdom. This means the existing civilization will come to an end. But bringing an end to civilization does not mean an end to people nor the earth, but an end to the political, economic and social systems that have failed humankind. With his church, Jesus will set up a new kingdom and a new era on earth. There may be still other views of “how” his return will take place. There are many religious groups who are willing to martyr themselves for their views. The views have several points in common - gather his church, bring an end to an old civilization, allow a global conflagration called Armageddon to take place and the arrival will be imminent. Regardless of the view followed, the second advent of Christ is part of the mainstream of Christian belief of his reign of peace on earth and good will toward men. Some of these believers have developed elaborate and detailed timetables and graphic end of the world scenarios. These scenarios have captured the attention of the world.

The mystery and the promise of the second advent of Christ have inspired the discontents. They want major changes in civilization. The existing civilizations are nothing more than the product of civilizations of the past. They have not brought fulfillment to expectations. The discontents want a whole new approach of living on planet earth. They want a whole new way of life to deal with disease, poverty, war, pestilence, starvation, violence and pollution. The pop-

ulation is doubling every 10 years. By 2050, the population of earth will be twelve billion. The urgency to have a whole new approach in a civilization of humankind has become crucial.

The Bible does refer to a period of “the time of the end.” (Dan 12:4,9) But this is not the end of the earth or of humankind. (Ecc 1:4) It is the end of the global systems that control and perpetuate an old civilization. (II Pet 3:6-10) It is a period of time in which a new global control system inaugurates a new civilization (Acts 3:19-21) Armageddon then is really a transitional period in which an old civilization will be replaced by a new one. The change will be horrendous. (Rev 11) The great fact to remember is that the trend of civilization continues onward and upward. If a civilization is stalemated or stagnant, it will decline and another will take its place. Progress is the law of expectation. The search for meaning is a search for a new civilization to replace an old, obsolete one, which has not served humans with their expectation.

#### IS THERE A FUTURE LIFE?

If a person had one beginning, could he have another? If a person has been, is it not possible to be again? If a human has lived, shall this human not live again? This life can't be all! Something more, still unknown to us, must lie ahead. A sense of internal justice tells us that we didn't ask to come into existence, yet we have. We didn't fabricate ourselves, yet we have a specification. We had no choice in our identities, yet we are identified. We seem to have a biological logic for perpetual existence, yet it must come to an end. We appear to be designed for eternity. The brain is designed to take in virtually unlimited amounts of information. The brain builds on previous knowledge. Animals cannot do this. Cell renewal is a mechanism in the body in which new cells replace old ones automatically. Our systems, structures and organs are so automated that the totality can go on and on. There appears to be no limit to the potential of human life. Inwardly, humans feel that this life has a fragmentary development. It does not seem to be finished. Something is missing and incomplete. It is often expressed, “This can't be all.”

There isn't an individual in the human family who does not dwell

on the question of a future life. The question and its subsequent belief are universally encountered. Many are even motivated, intensely and vigorously to work on life extension possibilities. There is the Cryogenic Society in Arizona which can cry-capsulate a human into a frozen state until the time when a medical cure is available. The frozen human is defrosted and the medical cure is applied. There are a few dozen frozen beings in this state now. There is also the organ transplant process where defective organs can be replaced by transplanted healthy organs known to function well. The transplantation list grows. These include heart, kidneys, livers, spleens, lungs, bones, veins and arteries. The list continues to grow. There are also the environmental long life regions of planet earth. There is an effort to find places on the planet, which enhance life extension. Such places as Ecuador, Georgia and Tibet have been known to produce centenarians. Many have moved to these areas with the hope of extending life.

Unfortunately, these possibilities are more life extension activities rather than the beginning of a new life after death. Whatever success an individual has with life extension activities, eventually the human dies. The days a person lives are numbered. A high number would be 80-90 years. Beyond this is unusual. Great efforts are made to reach these high numbers. But humans have learned well the curve of life. They see life like a parabola of a projectile. Starts at rest (birth), rises and ascends (growth), peaks and reaches a summit (maturity), then declines and descends (aging), to a state of repose (death). Humans ascend the curve of life energetically to maturity. They then struggle to stay at the peak. They settle down wanting to remain at the peak. They even want to stop the hands of the clock. But time goes on. Humans find themselves sliding down on the other side of the curve. They struggle to resist the slippage to the bottom of the curve. But no amount of effort stops them from eventually reaching the bottom where disappointingly life ends in death.

The Bible claims there will be a future life. This concept is explained as the resurrection. (Jn 11:25; 5:25-29; Acts 24:15) It could even be thought of as the second genesis, in which God is preparing humans to live an eternal existence, right here on earth. God will take the two ends of the curve of life and tie them together

into a perfect circle where there is no start nor finish, but is never ending. The Bible claims there are a set of books in which names are recorded. (Rev 20:12) One future day, these books will be opened. The involuntary compulsive journey to the grave will be removed. The free will choice originally given to humans will be restored. The word “darkness” found everywhere in the Bible has an alarming meaning that life is lost. But the word “light” also found everywhere in the Bible gives hope that life is also found. The search for meaning is the search for the pathway to life toward a second genesis. The vision of the future is far better than the history of the past. Every human life is a plan of God. See Figure 38.

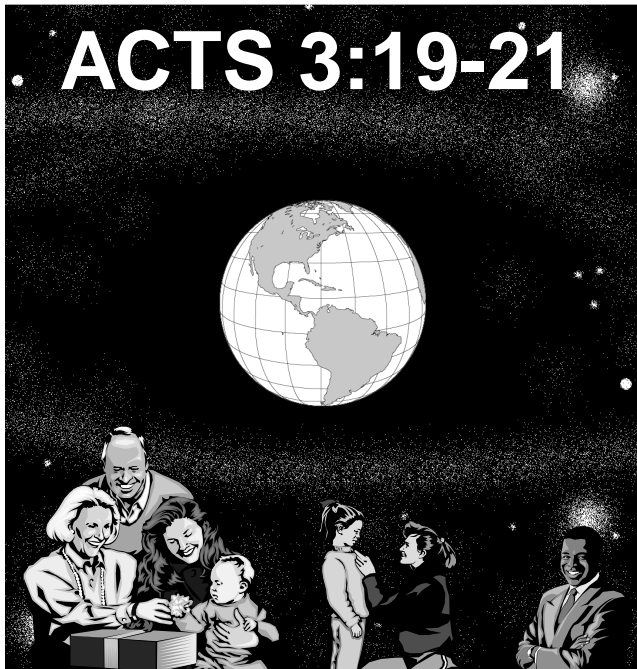


Figure 38 - Every Human Life is Part of The Plan of God

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## SUBJECT INDEX

### A

|                                       |        |
|---------------------------------------|--------|
| Abortion . . . . .                    | 99-100 |
| Affiliation . . . . .                 | 66     |
| Aging reversal . . . . .              | 4      |
| Animal cloning . . . . .              | 7      |
| Authors position on cloning . . . . . | xi     |

### B

|  |                     |
|--|---------------------|
| Begettal comparison with cloning . . . . . | 94                  |
| Begettal human process . . . . .           | 18, 54-58           |
| Begettal humans . . . . .                  | viii, 10, 56-58, 61 |
| Begettal humans as God's Design . . . . .  | Chapter 5           |
| Benefits of genetic engineering . . . . .  | 19                  |
| Biotech capability . . . . .               | 2                   |
| Biotech companies . . . . .                | 1                   |
| Blastocysts . . . . .                      | ix                  |
| Blood, life in the . . . . .               | 105                 |
| Book of Remembrance . . . . .              | 79                  |
| Brain and God Spot . . . . .               | 65-67               |

### C

|                           |               |
|---------------------------|---------------|
| Cell . . . . .            | vii           |
| Chromosome . . . . .      | viii, 107-108 |
| Clone . . . . .           | viii          |
| Cloned human . . . . .    | viii          |
| Clonee . . . . .          | viii          |
| Cloning . . . . .         | 25, 45        |
| Cloning cost . . . . .    | 11            |
| Cloning of pets . . . . . | 24            |

|  |        |
|--|--------|
| Cloning serious problems . . . . .           | .45-48 |
| Comparing, begettancy with cloning . . . . . | .94    |
| Concept life . . . . .                       | .x     |
| Conceptual life . . . . .                    | .96    |
| Conscience . . . . .                         | .66    |
| Conscious life . . . . .                     | .98    |
| Consciousness . . . . .                      | .66    |
| Copernicus . . . . .                         | .41    |
| Crustacean re-engineering . . . . .          | .4     |
| Curve of life . . . . .                      | .109   |

D

|                                  |                    |
|----------------------------------|--------------------|
| Demand for transplants . . . . . | .21-22             |
| Deoxyribonucleic acid . . . . .  | .viii, 73, 90, 107 |
| Design diversity . . . . .       | .71-72             |
| DNA . . . . .                    | .viii              |
| Dolly . . . . .                  | .7                 |

E

|                               |     |
|-------------------------------|-----|
| Endowment to humans . . . . . | .66 |
| Esther Island . . . . .       | .86 |
| Eternity . . . . .            | .4  |

F

|                     |          |
|---------------------|----------|
| FDA . . . . .       | .6       |
| Fetus . . . . .     | .100-102 |
| Free-will . . . . . | .66      |

G

|                        |    |
|------------------------|----|
| Gene mapping . . . . . | .5 |
|------------------------|----|



Genes .....vii, 5

Genesis account, main points .....55

Genesis, second .....26, 28

Genetic arrangement of male and female .....70

Genetic Engineering .....ix, 19, 23

Genetic engineering drawbacks .....21

Genetic engineers .....22

Genetic identity .....ix

Genetic manipulation .....3

Genome .....ix

Goals to be reached .....52

God spot .....ix, 60-67

God utilizes science .....40

God, playing of .....Chapter 6

God’s design .....Chapter 5, 52, 54-58

H

Holy spirit and cloning .....50

How a human can be cloned .....11-12

How Bible answers mysteries .....87-88

How can I qualify for life continuity .....122

How can we perceive God .....117

How does on play God .....91-93

How glory relates to God .....56

How therapeutic implants are made .....17

How to gain knowledge .....35

Hubble, Edwin .....42

Human life, needs of .....113

Human life, stages of .....95

Human soul .....76-78

I

Image and likeness .....59-61  
 Immortal souls .....74-77  
 Independent life .....98  
 Intention .....66  
 Interdependence .....83, 112  
 In-vitro fertilization .....27-28  
 Is there a future life .....128  
 Is human life a part of God’s plan .....130

K

Knowledge, ways to gain .....35-37

L

Library as metaphor .....5  
 Life concept .....x  
 Life, second genesis of .....26  
 Life/death issues .....15  
 Life’s mysteries .....48-49  
 Life’s questions .....Chapter 8  
 Lifetime production of eggs .....27  
 Lifetime production of sperm .....27  
 Logos .....58

M

Man’s thinking .....59  
 Marriage as a partnership .....63-64  
 Model for knowing things .....35  
 Morality .....66, 84  
 Mortality .....66, 75

|   |       |
|---|-------|
| Motivators for cloning humans . . . . .       | 6-8   |
| Motivators for therapeutic implants . . . . . | 14-16 |
| Mysteries, Bible gives answers . . . . .      | 87    |

N

|                         |       |
|-------------------------|-------|
| Nephilians . . . . .    | 84-89 |
| Newton, Isaac . . . . . | 41    |

O

|                                   |    |
|-----------------------------------|----|
| Organ parts . . . . .             | 22 |
| Overview stages of life . . . . . | 95 |

P

|                                   |           |
|-----------------------------------|-----------|
| Parthenogenesis cloning . . . . . | x, 16     |
| Playing God . . . . .             | Chapter 6 |
| Problems with cloning . . . . .   | 45        |

Q

|   |      |
|---|------|
| Questionable motivators for human cloning . . . . . | 9-10 |
|---|------|

R

|  |       |
|--|-------|
| Reasons for begettal humans superior . . . . . | 89    |
| Reasons for cloning . . . . .                  | 8     |
| Religion and science . . . . .                 | 32-34 |
| Reproductive technology . . . . .              | 26-29 |
| Resurrection of all people . . . . .           | 80    |

S

|                                |       |
|--------------------------------|-------|
| Satan in the Garden . . . . .  | 77    |
| Science and miracles . . . . . | 39-41 |

|   |       |
|---|-------|
| Science and religion . . . . .            | 32-34 |
| Science and technology . . . . .          | 6     |
| Science and the cloning process . . . . . | 1     |
| Science getting closer to God . . . . .   | 31    |
| Science, can it save us . . . . .         | 38-39 |
| Scientific achievements . . . . .         | 1     |
| Scientific criticism of cloning . . . . . | 44    |
| Scientific difficulties . . . . .         | 2     |
| Scientific method . . . . .               | 31    |
| Scientific views over the years . . . . . | 42    |
| Scientists make mistakes . . . . .        | 41    |
| Scientists playing God . . . . .          | 90    |
| Scientists, making of . . . . .           | 34    |
| Scriptural view of life process . . . . . | 101   |
| Seven sections of God spot . . . . .      | 66    |
| Sexual habits . . . . .                   | 4     |
| Siamese twins, a contradiction . . . . .  | 73    |
| Social unit of marriage . . . . .         | 65    |
| Souls . . . . .                           | 74-77 |
| Sperm . . . . .                           | 4     |
| Spirituality . . . . .                    | 67    |
| Stem cells . . . . .                      | x     |
| Stonehenge . . . . .                      | 87    |
| Surrogacy motherhood . . . . .            | 27    |

## T

|                                     |           |
|-------------------------------------|-----------|
| Theologians make mistakes . . . . . | 41        |
| Therapeutic cures . . . . .         | 13        |
| Therapeutic implants . . . . .      | x, 11, 17 |
| Transplants, demand for . . . . .   | 21-22     |

U

Unborn life .....97

V

Value of the begettal process .....18

W

What is my identity .....122  
What is the meaning of life .....116  
What is the origin of the universe and human life .....119  
What scientists cannot do .....93  
When does life start .....Chapter 7  
Where are we going .....124  
Who are we .....115  
Why are things the way they are .....122  
Why God allows science into mysteries .....49-51  
Why is there evil .....121  
Why scientists play God .....91-92  
Will the world come to an end .....126  
Wilmot, Ian .....7