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The Catholic Theology Of Genetic Manipulation

by

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Catholic theologians are prolific writers on a wide array of subjects. Genetic manipulation techniques are being refined and have increased rapidly in number and prominence. These two seemingly different subjects dovetail nicely to provide the Catholic Church a clear and well-defined stance on several genetic manipulation techniques. The most widely discussed genetic manipulation techniques are the various forms of artificial reproduction, embryonic and adult stem cell research, and gene therapy. The Church formulated opinions on these subjects by interpreting Biblical literature and previously defined Church doctrine. From these interpretations, the Catholic Church stands firmly against most forms of artificial reproduction and stem cell research, while it limitedly supports gene therapy.

As science progresses, artificial reproductive techniques have come to the forefront as a means to enable all people to have children. Various artificial fertilization techniques and cloning are the two most prominently discussed procedures. Currently, artificial fertilization is possible and frequently employed. Cloning, however, is only theoretically possible on humans but has already been employed on other organisms. As May describes, "Artificial fertilization is brought about when male sperm are not united with the female ovum through an act of sexual coition but by some other means."¹

These techniques are especially popular among people who are unable to have children via traditional methods; this includes groups such as infertile couples and homosexual partners. Imagine a husband and wife who want to have a child, but in so doing the wife would endanger herself due to uterine abnormalities. This couple could donate their sperm and egg, and find a surrogate mother to carry their child to term, thus enabling them to have a child. Also, using these techniques, two female partners could

essentially have a child with donated sperm and the help of doctor to fertilize her egg.

In a similar way, cloning provides a new method to have children. Grabowski accurately describes this as he writes, "reproductive cloning is a term employed to describe the effort to create a genetic double of a human being in the form of an embryo, and to carry that embryo to full term pregnancy. Reproductive cloning is distinctly different from the effort to clone individual cells or tissues for therapeutic purposes."² Thus, reproductive cloning involves reproduction of an entire organism, in which case the duplicate is genetically identical to the "parent."

The Catholic Position

To best understand the Catholic stance on artificial reproductive techniques, some basic Catholic theological premises must first be addressed. The Catholic Church believes that children are a privilege and gift from God, and perhaps God does not intend for all people to have children. In one of the Psalms, David writes, "Behold, children are a gift from the Lord; the fruit of the womb is a reward." (Ps. 127:3). Catholic theologians responded to this verse and extrapolated that if children are a gift, then simply wanting a child is not justification for a child. They concluded, "The desire for a child gives no right to have a child. The latter is a person, with the dignity of a subject. As such, it cannot be desired as an object."³

The Catholic Church also demands that life is not created in a haphazard manner, but rather created consciously and with great deliberation on behalf of parents wishing to have children. John XXIII notes that Nature itself dictates that the transmission of human life be a personal and conscious act and subject to the most holy laws of God, both immutable and inviolable laws that must be acknowledged and observed.⁴ May extends the remarks of John XXIII to show that marriage is the correct personal and conscious act that properly perpetuates procreation, and he further elaborates to describe the physical act that is most appropriate. He writes, "The child is the fruit of the marriage union, when it finds full expression by the placing in action of the functional organs, of the sensible emotions thereto related, and of the spiritual and disinterested love which animates such a union; it is in the unity of this human act that there must be considered the biological condition of procreation."⁵ Together, these assertions serve as the basis to the Catholic Church's stance on several artificial reproductive techniques.

The Catholic Church staunchly opposes almost all forms of artificial reproduction techniques because they reduce the dignity, holiness, and sacredness of human life. The Church concisely writes, "The various

techniques of artificial reproduction, which would seem to be at the service of life and which are frequently used with this intention, actually open the door to new threats against life."⁶ May simplifies this with the following syllogism. Any act of generating human life that is non-marital is irresponsible and violates the respect due to human life in its generation. Artificial insemination, in vitro fertilization, cloning, and other forms of generating human life outside the marital act are non-marital. Therefore, these modes of generating human life are irresponsible and violate the respect due to human life in its generation.⁷

John Paul II explains why generating life outside the marital relationship destroys the sacredness of life. He claims that these processes lead man to no longer consider life as a splendid gift from God. Life instead becomes a mere object, which man can then claim as his property. This in turn makes procreation subject to man's control and manipulation, and hence outside of God's proper authority.⁸ Under the control of human manipulation, life becomes a product. May clarifies, "Non-marital ways of engendering human life change its generation from an act of procreation to one of reproduction, treating the child as if he or she were a product, and therefore it is true to say that the child is 'made,' not 'begotten.'"⁹ Treating children or life in general as products is morally reprehensible. This is because, in making, the interest centers on the product made (the child), and products that do not measure up to predetermined standards are discarded or treated with disproportionately little appreciation.¹⁰ Grabowski concurs and adds, "Such procedures are morally objectionable because they depersonalize the children conceived by them. It substitutes the personal relations constitutive of our identity as persons with the impersonal ones of producer and consumer and product."¹¹ In short, the Catholic Church very much wants to see all children and people as highly respected and revered, and Catholic theology states that artificial fertilization reduces this respect, and hence is morally wrong.

Similarly to artificial fertilization, the Catholic Church adamantly opposes any form of human cloning. The current Pope writes, "The dignity of the human person demands that it come into being as a gift of God and as the fruit of the conjugal act of husband and wife, which is proper and specific to the unitive and procreative love of spouses, an act which of its very nature is irreplaceable."¹² Cloning obviously does not happen in this manner and thus the church opposes it. The reasoning is twofold. First, cloning tends to make bisexuality (in the sense of two people, man and woman) a functional leftover, given that a clone can be made from a single "parent."¹³ Second, cloning reduces the holiness and sacredness of life. As Grabowski explains, "Cloning attacks the personhood of those it produces by mocking the uniqueness and irreducibility of the person through the

attempt to make a genetic photocopy of the individual.”¹⁴ Thus, the Church opposes all forms of human reproductive cloning.

In some very limited cases the Church permits artificial fertilization techniques that aim to assist the natural act of procreation. Pope Pius XII describes, “The use of such artificial means is not necessarily forbidden if their function is merely to facilitate the natural act, or to ensure that a normally performed act reaches its proper end.”¹⁵ May elucidates the comment of the pope. To May a procedure assists the marital act if and only if a marital act takes place and the procedure in question either circumvents obstacles preventing the specific, coital marital act from being fruitful or supplies conditions needed for it to become effective in causing conception.¹⁶ For example, married couples can seek professional advice as to the best time to have intercourse. Also, hypospadias is an anomaly of the male penis in which it opens close to the body, and in this case, the church permits the use of a special condom to help facilitate correct deposition of sperm into the female’s vagina. Likewise, the church permits low tubal ovum transfer; in this case a woman’s fallopian tube is damaged and a doctor may assist the correct movement of the ovum to permit high chances of fertilization. All these cases fit the principles established above because the primary means is the natural act. The secondary means is the outside assistance by a professional.¹⁷ Thus, the Church believes that the only proper way for genes to pass from one generation to the next is through the natural act, and without any interference that takes away from that act.

The Church on Stem Cell Research

To fully understand the Catholic stance on stem cell research, stem cells themselves must be understood. Stem cells have been shown to be building blocks for almost all human tissue. They have the capacity to differentiate into any of the human cell types. Thus, if their differentiation could be controlled, they could be used to grow healthy tissue that would augment or replace diseased tissues. Scientists believe that this potential raises the opportunity to grow spare body parts that could correct several disorders and diseases.¹⁸ Techniques to obtain these cells involve the removal and manipulation of cells that make up the inside of the blastocyst, a small bunch of cells in the process of pregnancy. This inevitably leads to the destruction of the embryo and hence the potential child is never carried to full term. New technologies have also isolated stem cells from adults.¹⁹ In contrast to fetal stem cell research, these techniques are accomplished without any significant or permanent harm to the person, albeit they are much more difficult.

Some fundamental Catholic theology must also be teased out before stem cell research can be directly addressed. In the Catholic tradition it is

believed that God already knows the birth of all children. As Jeremiah writes, "Before I (God) formed you in the womb I knew you, and before you were born I consecrated you." (Jer. 1:5). Catholics believe that at the moment of conception life begins, and hence God's plan enacted. As the Pope writes, "From the time that the ovum is fertilized, a new life is begun which is neither that of the father or the mother; it is rather the life of a new human being with his own growth. It would never be made human if it were not human already."²⁰ The reasoning follows that because the embryo develops into a fully human person, it must itself be fully human. Neither egg nor sperm alone have this property, but united properly, they together form a person. Licht further elaborates, "Once there is a union of sperm and egg, what you have is a living entity with a full and unique genetic character. There shouldn't be a moral coarsening of appreciation for life that allows us to think of it as nothing."²¹ Thus, at the moment of conception the egg and sperm cannot be viewed simply as tissue, but rather as a full person with a soul and created within God's immaculate plan and image.

From these principles, the Catholic Church denounces all forms of fetal stem cell research, while it accepts some forms of adult stem cell research. In Wright's clear and stern words he writes, "Any non-therapeutic experimentation or research on human embryos is rightly condemned and utterly immoral." As stated before, a human being must be respected from the first instant of existence. Respect for the dignity of the human being excludes all experimental manipulation or exploitation of the human embryo.²² Therefore, stem cell research is ethically wrong. This follows because any non-therapeutic experimentation or research on human embryos, performed not for its own benefit but for that of others, is ethically wrong without consent, especially if it causes grave harm to the unborn child.²³

This issue of consent is critically important. A human embryo has no means to communicate this altruistic end, and thus experimental research and manipulation cannot be performed. On the other hand, take for example two brothers, one of which has two healthy kidneys, and the other of which has two diseased kidneys. It is morally justified for the healthy brother to donate one of his kidneys to his brother, despite the potential harm in so doing, because he can communicate this altruistic end. Wright succinctly summarizes this point, "Ethical norms on human experimentation have a demand that we never inflict death or disabling injury on any un-consenting individual of the human species simply for the sake of benefit to others. Thus, stem cell research requiring the destruction and sacrifice of human embryos should not be supported."²⁴

Contrary to fetal stem cell research, adult stem cell research is permitted if and only if the two above conditions are respected. First, the

removal of the stem cell from the adult must not adversely affect the individual. Second, the individual must give full consent to every part of the procedure. Wright again clearly denounces fetal stem cell research, and in doing so implicitly states that adult stem cell research is ethical, when he writes, "The existence of morally acceptable alternatives of consenting individuals that do not involve the destruction of human life for research purposes would support the conclusion that support for embryo research is unethical, for it needlessly relies on the destruction of life to advance medical goals which can be achieved in nondestructive ways."²⁵ In short, in standing up for the rights of the un-consenting fetus, the Catholic Church denounces embryonic stem cell research because of the harm it causes the embryo, while it allows adult stem cell research because adults can verbally express consent.

The Church on Genetic Manipulation

The Catholic Church steadfastly stands against some forms of genetic manipulation and therapy, while it endorses other forms. As the Human Genome Project continues, geneticists know increasingly more about many genes and genetic disorders. With more investigation this will provide the ability to determine the genes responsible for many characteristics, and perhaps it will lend itself to the possibility of curing or delaying several genetic problems.

The Catholic Church draws a distinct line in gene manipulation, "In moral evaluation a distinction must be made between strictly therapeutic manipulations, which aim to cure illnesses caused by a genetic or chromosome anomaly, from genetic manipulation altering the human genetic patrimony. A curative intervention is considered desirable in principle, provided its purpose is the real promotion of the personal well-being of the individual, without damaging his integrity or worsening his condition of life."²⁶

On these two points, the Church has very different stances. In regard to therapeutic means, the Church is receptive and encouraging, so long as proper precautions are taken. For example, if a gene for premature heart disease were discovered, the Church approves of gene therapy that would cure afflicted individuals. In fact, the Church claims, "There are no moral objections to the manipulation of human body cells for the curative purposes and the manipulation of animal or vegetable cells for pharmaceutical purposes."²⁷ Also, the Church encourages research in the agricultural and ranching fields. As Orsi notes, "The Church approvingly notes the advances brought about by biotechnology for the human good, in food production, husbandry, and the potential for immunization through genetically engineered vegetables that will save the lives of millions of

people."²⁸ In stark contrast, it stands firmly against any gene manipulation that would affect the germinal cells, in which case the person would then pass it toward their children.

The Catholic Church formulated the above stances based on four basic premises. First, in Catholic theology the most important and essential part of a person is the soul. The soul is not the owner or commander of the body, but rather, the soul is the steward over the body. To alter the genes of a person will necessarily alter the soul of that individual. Walter explains, "We are not owners of our own bodies but only stewards over them, so we are not free to manipulate our genetic heritage at will. The human body is not independent of the spirit and thus we cannot expect to alter our genes without also altering the body's relation to our spiritual natures."²⁹ The phrase "at will" is vital to Walter's explanation. He does not fully condemn it under all circumstances, but he condemns all gene manipulation without careful thought. Thus, genetic manipulation leads to a touchy issue about alteration of the soul, and therefore the Church wants to proceed slowly and with great deliberation.

Second, the Church foresees huge potential abuse. For example, suppose the gene for intelligence were found, the Church would not approve individuals manipulating their children or themselves to unnaturally have this gene. As the current Pope writes, "Interventions which are not directly curative, the purpose of which is the production of human beings selected according to sex or other predetermined qualities are contrary to the personal dignity of the human being, to his integrity and to his identity. Therefore they cannot be justified in any way by the pretext that they will produce some beneficial results for humanity in the future."³⁰

Third, genetic manipulation of the germinal cells pushes humanity to the brink of "playing God." Walter establishes this as he writes, "Genetic manipulation to influence inheritance that is not therapeutic but aimed at producing human beings selected according to sex or other predetermined qualities is judged contrary to the natural law."³¹ This is contrary to natural law because children are God's gifts; manipulation of the germinal cells of a person gives undue control over their child and usurps God's authority thereby taking away God's opportunity to freely give children as gifts.³²

Lastly, the Church condemns all experiments, even experiments with great benefits, which use unethical means. Non-therapeutic gene manipulation is unethical for the reasons stated above. To the Catholic Church, the ends do not justify the means.³³ In all, the Catholic Church wishes to proceed cautiously with therapeutic gene manipulation, but staunchly opposes any form of non-therapeutic manipulation aimed at selection or alteration of germinal cells.

In short, the Catholic Church has a well-developed dogma toward many genetic manipulation techniques. The Catholic Church's stance on

these issues originates from Biblical texts and previously established theology and doctrine. The Church clearly enumerates its stance on the techniques of artificial reproduction, stem cell research, and different forms of gene therapy. The Church continues to steadfastly oppose such techniques as in vitro fertilization, cloning, surrogate mothering, stem cell research, and gene therapy in all non-disease curing cases. The Church feels that these procedures change the way God intended life. In all other situations, the Church wants geneticists to proceed extremely cautiously and deliberately. Methods such as in vivo fertilization aimed at assisting the natural act, gene therapy targeted at curing specific diseases, and stem cell research on consenting subjects are justified and encouraged. As new science opens more doors, the Catholic Church will continue to resist all techniques that it feels negatively change man's relationship to God. At the same time, it will support and encourage research that has possible benefits and no negative side effects.

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