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In Vitro Fertilization and Artificial Insemination: Ethical Consideration

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LOYOLA UNIVERSITY OF CHICAGO

IN VITRO FERTILIZATION AND ARTIFICIAL INSEMINATION:
ETHICAL CONSIDERATION

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF PHILOSOPHY

BY

JOSEPH IBEGBULEM EKWEARIRI

CHICAGO, ILLINOIS

MAY, 1997

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iii
ABSTRACT	vii
INTRODUCTION	1
 Chapter	
ONE. INTRODUCTORY SURVEY OF ISSUES	4
The biological presuppositions	4
The male reproductive system	6
The testes	6
The penis	7
The female reproductive organs	7
The ovaries	7
The uterus	9
Infertility	12
Definition	12
Male infertility	13
Female infertility	13
The reproductive technologies	14
Some challenges to IVF	20
Psychological or social harm	27
Informed consent	28
What the technology is likely to lead to	33
Need for appropriate laboratory research	38
Presuppositions: the status of the embryo	44
Responsibility for decision-making and the how	50
A Philosophical Analysis	53
 TWO. A REVIEW OF RELATED ETHICAL PRINCIPLES ..	 55
Introduction	55
The natural law ethical principle	56
Aristotle on nature	57
Thomas Aquinas on natural law	62
Deontological ethical theory	76
Act-deontologism	77
Rule-deontological	79
The divine command theory	81
Kantian deontological ethical theory .	83
The role of culture	87
Utilitarianism	95
Jeremy Bentham	95

John Start Mill	96
Act utilitarianism	97
Rule utilitarianism	98
Conclusion	98

THREE.	THE MORALITY OF IVF/ET: A CRITICAL EXAMINATION OF CDF	100
	Concept of ontic evil	104
	Summary of the structure of moral law as taught by Aquinas	106
	The structure of human action	109
	The morality of the voluntas (the will)	125
	Exterior act	128
	The morality of the human action ...	129
	Textual exposition Instruction on Respect for Human Life and on the Dignity of Procreation: Replies to Certain Questions of the day.....	144
	Introduction	144
	Part I	145
	Respect for human embryos	145
	Part II	147
	Intervention upon human procreation Homologous artificial fertilization IVF/ET and artificial insemination between husband and wife	147
	Part III	154
	Moral and civil law	154
	A critique of CDF'S version of natural morality on IVF/ET and artificial Insemination	156
	The inseparability argument	161
	The error of moral objectivism	169
	Inseparability argument flawed on practical grounds	178
	The analogy between contraception and IVF/ET argument	183
	Marriage and the right to procreate argument	186
	Conclusion	187

FOUR.	THE VALUE AND DISVALUE OF IVF/ET: A CONSEQUENTIALIST EXAMINATION OF HARM/BENEFITS RESISTED	190
	Harm and benefits of present policy ..	190
	The value of children (human life) ...	193
	The Harm of IVF/ET or Disadvantages ..	201
	Benefits of a policy supporting	

IVF/ET	202
Psychological harm	206
Another possible harm from IVF/ET: death of embryo	214
IVF/ET and harm of deformity to embryo	226
IVF/ET and possible harm to the embryo's mother	233
Conclusion	237
FIVE. A CONSEQUENTIALIST OR PROPORTIONALIST EXAMINATION OF PROPOSED ALTERNATIVES TO IVF/ET	239
Alternatives to IVF/ET	240
(a) Adoption	240
The advantages of adoption	241
The disadvantages of adoption ..	245
Some hidden dangers of adoption revisited	253
(b) Surgical reconstruction of the oviduct and other surgical procedures	257
(c) Adjustment to infertility and acceptance of childlessness as an alternative	271
(d) Polygamy	278
CONCLUSION	297
BIBLIOGRAPHY	300
VITA	318

ABSTRACT

This dissertation is a carefully focused philosophical examination of the ethical arguments about the use of In Vitro Fertilization with Embryo Transfer (IVF/ET) and artificial insemination to assist infertile couples to bear their own genetic children. The dissertation sets the scene of its argument with a statement of its biological presuppositions and a review of the well known arguments about the morality of IVF/ET. It then examines Thomas Aquinas' teaching on natural law ethical theory, since some opponents of IVF/ET appeal to this theory to defend their position. Then the dissertation provides a detailed philosophical explanation and critique of an important document opposing IVF/ET. The author explains and critiques the best well known philosophical work against IVF/ET, *Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation: Replies to Certain Questions of the Day* by Congregation for the Doctrine of the Faith (CDF, 1987). CDF claims that unity of husband and wife, and procreation are essentially linked to conjugal act. That is, the proper nature of conjugal act is to unite husband and wife and to procreate children. But CDF did not show how the two aspects of the conjugal act that CDF considers necessary

(unitive meaning and procreative meaning), are necessarily present together in conjugal act, when very often, they occur separately. This position of CDF is based on a kind of natural law (deontological) moral argument which views IVF/ET and artificial insemination as unnatural, hence immoral. Then, on the basis of a proportionalist or consequentialist interpretation of Thomas Aquinas' natural law ethical theory, in contrast with the deontological interpretation of this ethical theory by CDF, the author shows that CDF's deontological ethical argument that IVF/ET is unnatural and therefore immoral is fundamentally flawed. Instead IVF/ET is shown to be both natural and morally justified. Using value assumptions about the two essential meanings conjugal act, the unitive meaning (love of spouses) and the procreative meaning (value of the child), which CDF itself accepts, the dissertation argues on proportionalist or consequentialist grounds that, in general, IVF/ET yields more goods than harms for those involved, especially in a culture like Nigeria. Moreover, a comparison of IVF/ET with other competing alternatives shows that, in each case, IVF/ET yields a better balance of good over evil than the other alternatives.

Therefore opponents of IVF/ET are not justified in condemning this technology as immoral either on the basis that it is fraught with serious risks/harm for the embryo or on the basis that it is unnatural.

INTRODUCTION

The new reproductive technologies have opened up yet another chapter of general moral concern in a world already fraught with many theoretical and practical moral issues. While governments, institutions and professional bodies were locked in theoretical moral debates about the morality of in vitro fertilization with embryo transfer (IVF/ET) and artificial insemination, individuals and groups of individuals were already engaged in the actual use of this technology to assist infertile couples to bear their own genetic children, some long before the debates even began. Presumably these individuals and groups knew or supposed the moral answer to the issue being debated was positive. Whatever rule of conduct these individuals have used for the judgment of their action, it is the goal of this dissertation to make a carefully focused philosophical examination about whether IVF/ET and artificial insemination can be morally justified, and under what grounds. The work will then provide a consequentialist or proportionalist philosophical framework for a moral justification of IVF/ET. The author hopes that the findings of this work

will be a genuine contribution to philosophical scholarship and that it will provoke more scholarly discussion about the morality of IVF/ET without an unexamined religious partisanship.

The dissertation contains Five Chapters. Chapter One will provide both the biological presuppositions or setting of the issue of IVF/ET and artificial insemination as well as a general review of the moral arguments for and against these procedures. Chapter Two will give a general sketch of the available ethical theories that can be used to establish a philosophical background for the morality of IVF/ET. It will take an in-depth look at Thomas Aquinas' account of natural law ethical theory for a proper understanding of arguments which many defenders and opponents have employed in the arguments on IVF/ET. In Chapter Three, the author will provide a more focused and detailed ethical philosophical foundation for both the critique and the defense of the morality of IVF/ET; it will then explain the position of Congregation of the Doctrine of the Faith (CDF) arguments, and show that CDF's moral interpretation of natural law ethical theory is deontological and that its fundamental argument against IVF/ET is flawed. On the basis of the account in Chapter Three, Chapter Four will make a consequentialist examination of the risks/harms and benefits of IVF/ET, and will show that in general,

the benefits of IVF/ET will yield more goods than evil for all involved, especially for some cultures like Nigeria where human procreation is for most people the primary reason for marriage. A consequentialist or proportionalist comparison of IVF/ET with other competing alternatives will be the focus of Chapter Five. It will be shown that in each instance, IVF/ET provides a greater balance of good over evil than its competing alternatives (adoption, surgical reconstruction of the oviduct and other surgical procedures, acceptance of infertility together with the development of other avenues towards leading a worthwhile fulfilling life, and polygamy). The dissertation will end with a general conclusion that CDF's basic deontological argument against IVF/ET as unnatural and therefore immoral not only does not hold, but that IVF/ET is in fact morally justified.

CHAPTER ONE
INTRODUCTORY SURVEY OF ISSUES

This philosophical work is primarily focused on ethical issues. But it has at the same time, biological and technological foundations which determine to a great extent the content and range of ethical issues to be examined in the dissertation. Even though many of the biological facts of the processes of human reproduction are well known, the central position of these facts in this project calls for a brief descriptive account of them. In this way the reader will be well prepared for the variety and complexity of the arguments which the reproductive technology of in vitro fertilization with embryo transfer (IVF/ET) raises.

The biological presuppositions

As this work will show later, human infertility which occurs in a number of forms has been the most important motivating factor in the development of the technologies being discussed here. For the major goal of this reproductive technology has been the successful treatment of infertility. When this goal has been achieved, it is hoped that the attendant negative impact of infertility in the lives of childless couples will also disappear. For the moment, the focus will be on the causes of infertility, in order to then understand the various reproductive

technologies developed to overcome it, especially IVF/ET. But it is worth noting that the most general ethical justification for the development and use of reproductive technologies has already been identified. It is a consequentialist or proportionalist justification; namely, that the cost and other burdens of developing and using reproductive technologies are outweighed by the benefits of fertility and of lessening or if possible eliminating the harms of infertility for the people involved. This utilitarian or proportionalist defense is necessary because no better alternative exists for those affected than this. It will be necessary to return to examine this ethical position in detail later in chapters three and following.

Why are some of the couples who want children unable to have them? To appreciate the effects of reproductive technologies, one must first study the human reproductive systems. We need sufficient facts about the human reproductive system to answer the questions people have regarding IVF/ET.

The major human reproductive organs are: (a) For the Male: the testes; the penis; the tubes; and the glands namely, the epididymis, the vas deferens, and the ejaculatory ducts; (b) For the Female: the ovaries; the fallopian tubes or oviducts; the uterus; the cervix and the vagina (Alpern 1992:16-17). But while all the above organs are important, each in its specific mode, we need to pay

particular attention only to the testes and the penis with regard to the male and the ovaries and the uterus in regard to the female.

The male reproductive system:

This section does not pretend to give an exhaustive account of the structures and functions of the male reproductive system. It focuses on what is of relevance to this work in a summary fashion.

The testes: The testes are essential organs of the male reproductive system because the sperm, the male contributor to conception, develop there. The testes originally develop within the abdominal cavity and then descend and are suspended below the abdomen in the scrotum during the last month or two of fetal development (Creager 1983:731). However, it sometimes happens that the testes fail to descend into the scrotum. When such an abnormality occurs, then a man will be sterile (Swanson 1974:60). This is one cause of sterility in the male.

The reason for the special location of the testes in the scrotum, separated from the main body cavity of the abdomen, is that normal body temperature seems too high for the sperm. "The normal temperature of the testes in the scrotum is 2 [degrees] C lower than the internal body temperature - the ideal temperature for developing sperm" (Creager 1983:732). But the sperm's equal need for

protection from excessive cold is marked by the fact that the muscle of the scrotum in which the testes are suspended contracts during cold weather toward the abdominal cavity in order to allow "the testes to absorb heat from the rest of the body so that the sperm cells do not become chilled" (Creager 1983:732). The testes not only produce sperm but also the male hormone known as "testosterone", a hormone that is essential both "for the development and maintenance of the male secondary characteristics throughout the reproductive life of a male" (Creager 1983:407).

The penis: This organ is appropriately structured in addition to its other roles to "deposit sperm into the reproductive tract of the female during sexual intercourse. During sexual arousal the penis enlarges and stiffens and erection is produced" (Creager 1983:734). But the stiffness and erection that are necessary requirements for the penis to deposit sperm into the reproductive tract of the female are not always accomplished. "Sometimes the man's penis does not become and remain stiff enough to penetrate the vagina; in this case he is said to be 'impotent'" (Swanson 1974:91). This is another cause of infertility in the male.

The female reproductive organs

The ovaries: The ovaries are reproductive organs that are located on either side of the uterus and are responsible for producing the ovum, the female contribution to conception.

They also produce the female sex hormones, estrogen and progesterone, which are highly necessary in human reproduction, affecting the development of the ovum in the ovary as well as preparing the uterus to receive the conceptus if conception takes place.

The ovaries of a woman of child bearing age, approximately 12 to 47, release one mature ovum once in approximately every 30 days. Ordinarily fertilization of the ovum takes place in the oviduct by sperm that have made their way from the vagina to the oviduct. Some sperm are not efficient in making their way from the vagina to the oviduct, which can be another cause of a couple's infertility. Although it is normal that only one egg is released (ovulation) by the ovaries in each cycle, it sometimes happens that more than one ovum is released and this brings about the possibility for multiple, fraternal birth (Freiberg 1987:76).

Serious illness and various other circumstances can prevent a woman once fertile from ovulating. Obviously the absence of any ovum makes conception impossible for her (Freiberg 1987:76-77).

It is important to note that at birth a human female's ovaries already contain all the ova the female will need for reproduction for the fertile days of her child-bearing age, (12 - 47). At birth a female has "about 2 million primary oocytes ... and by puberty about 400,000 remain, 200,000 in

each ovary" (Creager 1983:738). This is unlike the male whose testes continuously produce sperm from puberty, "at the rate of several million every few days" (Freiberg 1987:78). The production of sperm continues throughout life even though the production of testosterone, a hormone that is responsible for the production of sperm in the testes, may decrease in amount as the male progresses in age, (Creager 1983:730 - 731). Thus a normal male at any age can produce sperm to fertilize an ovum and a normal female will produce a fertile ovum once each cycle over her whole child-bearing time.

The uterus: The uterus is a muscular organ of the female reproductive system in which the conceptus implants and develops after the ovum has been fertilized by the sperm in the oviduct. The fertilization of an ovum by a sperm occurs within 24 hours after ovulation and 4 to 6 hours or even in as little time as 30 minutes after sexual intercourse depending on how rapidly the sperm moves to the ovum (Browder 1991:149; Creager 1983:748; Swanson 1974:116).

As we saw above, the penis deposits several million sperm in the female reproductive tract during sexual intercourse. Various intricate developments involving biochemical and biophysical changes take place as the sperm move to meet the ovum and penetrate it for fertilization. The initial changes which sperm undergo before they can fertilize an ovum is called "capacitation" and "this

normally takes place in the female genital tract" (Bernstein and Siegel 1991:622), or it can "occur either in the uterus, the oviduct or both" (Browder 1991:132). The exact mechanism of capacitation however, remains poorly understood. (Browder 1991:132; Davajan 1991:624).

The fertilization of the ovum by the sperm immediately commences a complicated process which must take place for the formation of "all of the cells, tissues, organs and systems of the human body" (Creager, 1983:80). For this further growth to proceed normally, the new organism must come to be stationed at an appropriate place in the female reproductive organ; that is in the wall of the uterus. Defects in the structure or chemistry of the oviducts and uterus can make this implantation of the conceptus impossible or so inefficient that the conceptus cannot develop properly. Thus, some forms of infertility involve inability to conceive; other forms involve inability of the conceptus to properly implant and develop in the uterus. Creager, (1983:759) gives us a description of the developmental processes of human life leading from fertilization to implantation:

After fertilization occurs in the uterine tube, the fertilized ovum, or zygote, undergoes several mitotic divisions known as **cleavage**. ... a single cell becomes two; each of the two divide, making four; each of the four divides, making eight cells; and so on, until a solid ball of cells, the **morula**, is formed. About three days after fertilization the morula arrives in the

uterine cavity, where its cells undergo a rearrangement to form a hollow ball, the **blastocyst**.

During the second week the blastocyst undergoes further changes before it implants in the wall of the uterus. The cells of the inner cell mass continue to divide by mitosis, and two cavities - the **gut cavity** and the **amniotic cavity** - form. Between these two cavities is the **embryonic disc**, from which the developing embryo will form....

Toward the end of the second week of development, the blastocyst enzymatically digests its way into the **decidua basalis**, the deepest layer of the endometrium, and is covered by other uterine tissue called the **decidua capsularis**. This is the process called **implantation**.

Not all the cells of the fertilized egg which have developed into the blastocyst stage of early human development will make up the actual human being who will eventually be born. It is noteworthy that it is specifically "only the cells of the embryonic disc" which develop into the actual human being that is born. The rest of the cells form external materials, such as "the placenta or membranes that surround the embryo" (Creager 1983:81).

Therefore, a couple desiring to conceive and bear a child of their own in the normal way, must have functional reproductive systems. For as Mbiti has written: "Sexual organs are the gates of life" (1969:146). We turn now to consider in more detail what might go wrong with the male or female reproductive system to cause infertility and childlessness for a couple.

Infertility

Definition: By the standard, technical definition, infertility is "the inability of a couple to conceive after 1 year of sexual intercourse without using any type of contraception" (Mishell and Davajan 1991:557). By this standard, about 15 percent of couples (Freiberg 1987:438), are infertile. Mishell and Davajan distinguish between two categories of infertile couples. Those with a low rate of conception who are nevertheless able to conceive without any medical treatment (but who go longer than a year without conceiving) are distinguished from those who cannot conceive at all without medical assistance (1991:557). The later category is the one that is of interest to this work and the terms "infertile" and "infertility" will be used henceforth here to refer specifically to this group. However, because of the importance of African and especially Nigerian cultural traditions to certain parts of this study, it is important to point out that "There is no clear distinction in much of Africa between barrenness, subfecundity, and child death" (John C. Caldwell and Pat Caldwell 1987:417).

Various kinds of problems account for the infertility among couples. Some of these problems are specific to the males, others are specific to the females. In about 20 percent of cases of infertility, both partners have problems that need to be addressed (Freiberg 1987:438). These include "couples who have failed to achieve pregnancy despite

evaluations that uncover no obvious reasons for their infertility or to those who remain infertile despite correction of all detectable causes of infertility" (Foad Azem et al 1994:1090). This kind of infertility accounts for "approximately 10% to 15% of infertile couples" (Foad Azem et al 1994:1090).

Male infertility

Bernstein and Siegel identify several factors responsible for male infertility. There are anatomic factors such as congenital anomalies which might interfere with the male delivery of semen into the vagina, for example, partial or total absence of the vas deferens through which the sperm pass to reach the penis and then the vagina. Other contributing elements to male infertility that could occur include: endocrine problems, such as pituitary tumor or testicular failure; genetic factors such as sex chromosome abnormalities; inflammatory problems whereby ejaculatory ducts can be blocked. Examples of this last category include urethritis caused by gonorrhea or external agents such as X-ray and radiation (Bernstein and Siegel 1991:628).

Female infertility

Female infertility can be caused by: the inability of women to produce ova (anovulation); pelvic factors such as tubal blockage; abnormalities in the endocrine system such

as insufficient cervical mucus, which prevents sperm from traveling to the oviducts in good condition for conception; and inflammatory diseases such as gonorrhoea, chlamydia, tuberculosis, and polyps which could have the same effects (Mishell and Davajan 1991:562; Freiberg 1987:439).

Medical technology has been successful in the treatment of some of these infertility problems through modern surgical techniques such as laser surgery (Freiberg 1987:439); and some chronic infectious conditions can be treated medically and cured, although long-standing infections can do permanent damage to the reproductive system that can render a woman infertile even after the infection is cured. But the major concern of this project is infertility of couples which cannot be alleviated by medical or surgical techniques. It was for infertility of this sort that the reproductive technologies, including in vitro fertilization with embryo transfer, were developed. This essay now turns attention to them.

The reproductive technologies

First, a distinction must be made between contraceptive and conceptive reproductive technologies. Contraceptive reproductive technologies are medical and technological interventions which are designed to interrupt and prevent pregnancy. They include, diaphragms, intra-uterine devices, sterilization, abortion, the 'pills', hormone-suppressing

drugs, spermicides, and barrier techniques such as cervical cap and condom, (Stanworth 1987:10, Mishell 1991:827-835, Oakley 1987:40). Periodic abstinence from sexual intercourse, following the so-called "natural family planning" or the "rhythm" method, is another form of contraceptive technique (Mishell 1991:835-836).

Conceptive technologies are those medical technological devices which are "directed to the promotion of pregnancy through techniques for overcoming or bypassing infertility" (Stanworth 1987:11). They are also called "'artificial procreation' or 'artificial fertilization'" (Congregation For The Doctrine Of The Faith [CDF] 1987:21). These are "the different technical procedures directed towards obtaining a human conception in a manner other than the sexual union of man and woman" (CDF 1987:21).

According to Fletcher, "The new conceptive technologies operate all the way from the germ cell through fertilization and gestation and fetal control to delivery and postnatal therapy of newborns" (1988:10). By way of specification then, the variety of conceptive technologies include 'artificial insemination' which may or may not require a specialized medical intervention, 'in-vitro fertilization', which involves very sophisticated medical surgical and laboratory procedures" (Stanworth 1987:11).

Other reproductive technologies include, sex selection, whereby the sex of an offspring can be determined

or predetermined and chosen, sperm and zygote banking or embryo and oocyte cryopreservation, whereby embryos which are not transferred in a woman's uterus can be preserved for future use (Largey 1978:1439; Paulson 1991:817). Largey, however, points out that although an effective technological means for sex selection has not been developed, its availability in the future will be inevitable.

This dissertation focuses on the philosophical basis for an acceptable ethic of *in vitro* fertilization with embryo transfer (IVF/ET) and artificial insemination. Henceforth this work shall simply refer to all these procedures as IVF/ET except where otherwise specified. This means that, surrogate gestation and donor sperm and egg, will be left out of consideration. In this connection the primary position of *in vitro* fertilization among all existing and emerging reproductive technologies at present can hardly be overrated; but its factual data needs to be addressed.

IVF/ET has been developed out of need to alleviate infertility that is brought about by various kinds of tubal diseases and abnormalities which could not be cured by other medical or surgical means (Paulson 1991:807). IVF/ET, then, "performs the function of the fallopian tube" (Paulson 1991:807), without which fertilization or conception is impossible. IVF/ET procedure:

"begins with drug therapy to produce super-ovulation in a woman. Through a procedure called laparoscopy, the resulting eggs are removed from the woman's reproductive tract and then fertilized. An embryo is then implanted in the woman's uterus and, if the implantation is successful, carried to term. The remaining embryos are stored, either for future implantation should the first attempt fail, or for use in scientific or medical experiments (George P. Smith II 1990:24).

Artificial insemination (AI), as was already noted, is of two kinds; homologous artificial insemination (AIH) and heterologous artificial insemination (AID). The former occurs when the semen is obtained from the husband of the woman whose ovum is fertilized while the latter occurs when the semen is acquired from a donor (see Richard Westley 1989:84). In both cases, semen is obtained by means of masturbation (Frankel 1978:1444; CDF 1987:32). Throughout this study, AIH, homologous artificial insemination will be the focus unless otherwise indicated. When IVF/ET (AID), is mentioned, it will be for the sake of analogy or comparison. Specifically then, homologous IVF/ET could be used where childlessness is due to a husband's insufficient sperm production ("oligospermia") or "low motility" or "immobilization of sperm in the cervical mucus" or problems with the volume of semen (Davajan 1991:605, 607) necessary for the fertilization of his wife's ovum or insufficient "viscosity", that is, "incomplete liquefaction" (Bernstein and siegel 1991:622; Davajan 1991:607) of the semen for proper motility of sperm and fertilization of ovum.

Specific and individual reasons abound for the use of IVF/ET where the reproductive condition of a wife is the cause of childlessness in her marriage. The reasons include: "where a wife suffers from abnormal cervical mucus or insufficient amount of essentially normal mucus at midcycle" (Davajan 1991:603-604).

The number of women with infertility problems appears to be numerous. This author assumes that at worst, what is true of the United Kingdom and the United States of America¹, could be true of another nation, for example, Nigeria, in the specific frequency of infertility due to tubal blockage. It is estimated that "in the United Kingdom approximately 2 percent of all women suffer from tubal occlusion" (Edwards 1974:10). Of this number only about one fifth could be helped through an alternative means of "tubal reconstruction" (Edwards 1974:10). In the United States of America, the estimate is "that 15% of all married couples" are infertile (Blank 1985:14). Of this number it is estimated "that between 0.5% and 1% of all American women can be helped no other way except by IVF (Blank 1985:14; LeRoy Walters 1979:26).

But the question of number of women suffering from infertility is not limited to those suffering from tubal occlusion. There are other forms of infertility. They

. The assumption is made because of lack of accurate statistical record, say for example in Nigeria.

includes "endocrine disturbances or antibodies against spermatozoa in men and women, and oligospermia in men" (Edwards 1974:10). Only a fraction of the men with oligospermia could be helped by "artificial insemination using pooled ejaculates." (see Smith II 1990:24). There is no doubt therefore, that the "most obvious benefit of IVF is that it circumvents infertility and allows persons with a strong desire to have children to rear a family" (George P. Smith II 1990:25; cf. also Westley 1989:85).

The pioneering work on IVF/ET was done by, among other scientists, a British embryologist, R.G.Edwards. He describes IVF/ET as the "ability to fertilize human eggs in culture, grow them for three to four days in the laboratory and then replace them in the mother to grow to full term" (Edward and Sharp 1971:87). Or if one prefers, IVF is "the fertilization in the test tube, of human egg by human sperm, and the subsequent laboratory culture of the young embryo" (Kass 1972:23).

This technology involves considerable technical and ethical difficulties which both proponents and opponents of the procedure seek to overcome. One of the major technical difficulties which this procedure involves is to "obtain mature, functional eggs." In order to overcome this difficulty, "Edwards and his obstetrician colleague, Dr. P. C. Steptoe, have devised a surgical method, known as laparoscopy, to obtain matured eggs directly from the

ovaries prior to ovulation" (Kass 1972:23). More recently, the woman's ovaries are now stimulated with drugs to produce multiple ova (superovulation) to increase the chance that laparoscopy will obtain (several) healthy ova for insemination. But it is the ethical problems relating to this technology that interest us most here.

Some challenges to IVF.

The debate which this work is concerned about, is captured by the following:

The use of new biotechnology in medicine has become an everyday experience, but many people still express concern about biotechnology. Concerns are evoked particularly by the phrases genetic engineering and in vitro fertilization (IVF), and these concerns persist despite more than a decade of their use in medicine (Darryl R. J. Macer 1994:23).

The promise of IVF/ET to alleviate infertility has been challenged on more than one front. For example it has been confronted on medical grounds; and so questions have been asked: "is infertility really a medical need" (Walters 1979:26)? Is it is a "disease" or a "desire" to have one's own child (Kass 1972; Kass 1974:138-139; Kass 1985:55;), and so is a warrant or justification of the roles played by medical researchers to satisfy this need?

Some of these thinkers raise philosophical questions. For example Walters, highlights the philosophical concept of

"the nature of infertility as a disease" on which some authors take a position when they turn to IVF/ET as the medical answer to the physical problem of infertility. Whether or not infertility is a medical need, a disease or desire, depends on the meaning one attaches to it.

Still other opponents have challenged this technology on more specific philosophical grounds - purely metaphysical and ethical reasons. For example, some have said that "The process of IVF and ET must be judged in itself and cannot borrow its definitive moral quality from the totality of conjugal life of which it becomes part nor from the conjugal acts which may precede or follow it" CDF (1987:29). More precisely CDF believes the procedure is inherently unethical because it severs a necessary relationship between marital sexual intercourse and human reproduction as well as the unity between spouses (cf. CDF 1987:26-29; Smith II 1990:25).² For CDF "Fertilization achieved outside the bodies of the couple remains by this very fact deprived of the meanings and the values which are expressed in the language of the body and in the union of human persons" (1987:28).

On other ethical grounds especially harm, the procedure is viewed as immoral. For example, it is claimed that "IVF

. George P. Smith does not necessarily share CDF's views about the severance between marital sexual intercourse and human procreation. But this author believes that Smith correctly interpretes CDF's' philosophical thinking about the issue being discussed.

and ET involves the destruction of human beings" (CDF 1987:29; Smith II 1990:26). Or as it is said: "Methods of observation or experimentation which damage or impose grave and disproportionate risks upon embryos obtained in vitro are morally illicit for the same reason" (CDF 1987:18). Still further ethical objections are raised against IVF/ET because it is used for experimentation on fetuses which causes them pain (Smith II 1990:25).

On the other side the proponents of IVF research hold that "the desire to have children must be among the most basic of human instincts and denying it can lead to considerable psychological and social difficulties" (Edwards and Sharp 1971:87; Lappe 1974:143;). For these authors, infertility seems to be "clinical defect to be remedied if possible by medical attention" (Edwards and Sharp 1971:87). It is a kind of unhealthiness to be corrected by available appropriate medical means if the patient chooses it.

Some of the opponents of the IVF/ET who argue that infertility is not a disease, propose that a resort to IVF/ET to alleviate infertility is not a resort to medicine for the cure of a disease, but a resort to medical technique to satisfy the desire of an infertile couple for a genetic offspring. Thus the procedure does not cure the infertility since the woman "remains as infertile as before" (Kass 1971:1176-77).

Kass' argument seems to carry little or no force at all when placed side by side with other human ailments which are treated by artificial means without permanently curing them. For instance "insulin, false teeth, and spectacles" (Edwards 1974:11) are meant to bring temporal relief to some health problems. It is argued that, in these three examples, the physician is also treating the desire of a patient "to be nondiabetic or to see and eat properly" (Edwards 1974:11), just as the physician is using IVF to respond to the desire of a childless couple to have their own child.

At the root of this debate is the issue of the meaning of the concept "health" and, more narrowly, the categories of human functioning that are to be considered normal, not just in the sense of a statistical average, but in the sense that they are normative, they are the functions that mature humans should have and should keep and should be helped to maintain. We will have to explore some fundamental philosophical questions about what it is to be a human person, to study the ethics of using IVF/ET to assist the infertile.

Furthermore, the benefit-oriented argument for IVF/ET has also been challenged by Kass. Against the view that IVF/ET is the only method to help many women who are infertile due to tubal occlusion, "surgical reconstruction of the oviduct" (Kass 1972:26; Kass 1985:56) is suggested as an alternative means as a safeguard against potential

hazards of the procedures and their unacceptable ethical implications. Kass says that this is a preferred therapeutic procedure which avoids unnecessary manipulation of reproductive method and the risks of the loss of embryos.

Although Kass thus argues that IVF experiments involve great risk of harm of unknown nature, he also adopts at some stage the mediating view which is essentially consequentialistic in character; namely, that caution should be exercised to see that the risks be comparatively as low as those found in natural method of human reproduction. In this direction, he seems to argue against some authors who advocate total prohibition of the technology of IVF/ET because of the many unknown risks it embodies for the child in the making, as when he says: "But I do not think that the risk of harm must be positively excluded... It would suffice if those risks were roughly equivalent to the risks to the child from normal procreation" (Kass 1985:55).

Other alternatives to IVF/ET, have been proposed. For example "acceptance of childlessness together with the development of other avenues towards leading a worthwhile fulfilled life" (Susan Uniacke 1987:243; CDF 1987:34)³ is said to be a better answer than IVF/ET to the problem of infertility. As Uniacke has observed, "whether acceptance of childlessness is a satisfactory alternative to IVF will have

³ . Susan Uniacke does not necessarily endorse this proposal. She simply cites it as one of the proposed alternatives to IVF/ET.

bearing on what type of problem infertility is and how seriously it should be regarded" (1987:243). Uniacke's observation is fittingly forceful in the face of the question, whether infertility is "really a medical need", "a disease" or whether it is simply a desire to have one's own child."

Still other alternatives as old as marriage itself in some cultures have been in use to combat infertility. For example, it must be noted with some emphasis that long before IVF/ET, Africans contained infertility by "polygamy" (cf. John S. Mbiti 1969; M Angulu Onwuejeogwu 191975; J. F. A. Ajayi 1965; Nicholas N. Obi 1987; Elizabeth Isichei 1995). But others still have proposed "adoption" (CDF 1987:34). Also, divorce or separation of spouses is another alternative to answering the problem of infertility in African cultures. According to some authorities, infertility is probably the greatest single cause of divorce "since inability to bear children blocks the stream of life" (Mbiti 1969:145).

On the other hand, R.G. Edwards, one of the foremost of the exponents and innovators of IVF who made the procedure a reality of our time, argues in favor of IVF/ET on the basis of foreseen benefits of the technology. He notes that humankind will benefit immensely and in various ways from the medical breakthrough of IVF/ET: (1) "Some forms of infertility (blockage of the oviduct) could possibly be

cured; (2) knowledge useful for contraceptive⁴ technology could be gained; and (3) knowledge and methods could be obtained leading to the alleviation of genetic disorders and even other deformities" (Edwards 1974; Hirschhorn 1974:68-69).

Other thinkers have argued that risk of harm to the embryo does not support a strong criticism of the morality of IVF. For it is claimed, that the danger the embryo is exposed to in terms of risk of deformity (mental or physical), or even total destruction, is not different from the risk it experiences under ordinary process of human conception (Lappe 1972:105; CDF 1987;14).

In fact it is well known that as much as "50 percent of eggs successfully fertilized during unprotected sexual intercourse fail to implant ... and are shed soon thereafter" (Lappe 1974:144; Kass 1985:107). Some authors contend even a higher rate of loss of fertilized eggs based on scientific evidence - about 75% loss (cf. Jeffrey Reiman 1993:174).

However, this technology of IVF/ET has helped thousands of barren married couples to bear their own genetic children throughout the world. For example, available report confirm

. But contraception itself raises some independent ethical questions.

that "more than 150,000 children have been born worldwide through IVF-ET" (Francois Olivennes, et al 1997:284).⁵

Psychological or social harm

There is yet another set of benefits/harms-based arguments brought to bear against IVF/ET. This set concerns itself with the end product of IVF with regard to the identity of the child in the society. It is argued that the child of IVF/ET will suffer psychologically about the image of himself or herself given the fact that he or she is a direct product of artificial means of reproduction (Cynthia B. Cohen 1996:20; Smith 1990:25; CDF 1987:32; McCormick 1978:1462).

Some other serious objections of demographic kind have been brought against IVF/ET. For example, it has been argued that the selection of sex through the perfection of IVF/ET could cause a major imbalance in the world's population.

In every instance, arguments of this sort need to be developed with both a full evaluation of the feared outcome, and evidence of its likelihood, together with a careful value-comparison of that set of future events (including the benefits of IVF/ET for parents and offspring who benefit from the procedure) with the alternative set of future

. Cf. "Follow-up of a cohort of 422 children aged 6 to 13 years conceived by in vitro fertilization" by Francois Olivennes, et al; in: *Fertility and Sterility: Official Journal of The American Fertility Society*, The American Fertility Society, 1209 Montgomery Highway, Birmingham, Alabama, Vol. 67, No. 2, February 1997, pp. 284-289.

events in which IVF/ET is not practiced. Rarely do critics of IVF/ET work out the details of such an argument with any care. But those who support IVF/ET on the basis of its benefits rarely do so either. Attempts will be made to supply that lack in chapters three, four and five; where the benefits and harms/risks/burdens of IVF/ET will be treated at length.

Informed consent.

Medically, "Informed Consent" may be defined as the willingness of a patient to accept without force or any form of manipulation, a medical intervention, after sufficient explanation has been made of the given medical intervention by a health care-giver. Usually the information about the medical intervention includes: "its risks, and benefits, as well as of alternatives with their risks and benefits" (Jonsen, Siegler and Winslade 1982:62).

The sufficiency of informed consent is measured by two criteria, namely: "(1) information that is commonly provided by competent practitioners in the community or the specialty; (2) information that would allow reasonable persons to make prudent choices in their own behalf" (Jonsen, Siegler and Winslade 1982:62).

Both opponents and proponents of IVF/ET see the relevance of informed consent as a criterion of ethical use of IVF/ET. Watson stresses the importance of informed

consent when he says that "as many people as possible be informed about the new ways of human reproduction and their potential consequences, both good and bad" (1974:75). Some writers however, think that not enough information is ordinarily given to the participants of IVF/ET in order to elicit their full consent before subjecting them to any experimentation. Kass, for example, says that "most of the scientific reports on human embryo transfer were strangely silent on the nature of the egg donors, on their understanding of what was to be done with their eggs, and on the manner of obtaining their consent (1985:56). Kass rightly believes that this kind of medical experiment should be condemned as "cruel and unethical" because it falsely generates the participants' hope "by telling the women that they themselves, rather than future infertile women, might be helped to have a child, in order to secure their participation in experiments" (Kass 1972:31; Kass 1985:56). Kass' observation seems proper, especially as the heightened desire of infertile women to have children may unduly lead them to give in to possible uncritical promises of the researchers.

It is quite obvious however, that most of the exponents of the technology of artificial human reproduction, fully recognize the significance of informed consent. They do ordinarily guard against any unwitting exploitation of the infertile condition of the couples desperately desiring to

have genetic children of their own. Contrary to Kass' argument just above, they argue that many infertile couples are willing to cooperate with the experimental work on fertilization and embryo transfer. They claim that their patients are well informed about the procedures. In addition, the patients are aware that "the methods might not work, their infertility remain uncured, and that other women may be the ultimate beneficiaries of the developing methods" (Edwards 1974:11).

Kass also raises an important question about the desire to have children in the first place. Do we have children primarily for ourselves or for our children? Kass argues that "if having children is regarded primarily as the satisfaction of parental desires, to attain our own fulfillment and happiness" (1985:55), then one cannot ethically choose for an unborn child, especially the unconceived, "the unknown hazards he must face and simultaneously choose to give him life in which to face them" (Kass 1985:54).

If on the other hand "we have children not primarily for ourselves but for our children, if procreation means to pass on the gift of life to the next generation ... then this clear benefit to a child to be, even to a child at risk, as all our children are, could justify the risks taken because they are taken in the child's behalf- provided, of course, that the risks are not excessive" (Kass 1985:55).

Obviously these considerations bear on benefits-based arguments for IVF/ET as well as on the conditions that need to be met for proper informed consent by participants in IVF/ET.

The proponents of IVF/ET are also equally concerned as their opponents about the psychological and other well beings of the product of IVF, as when they note for example that:

If there is no undue risk of deformity additional to those in natural conception, and publicity is avoided, the children should grow and develop normally and be no more misfits than other children born today after some form of medical help (Edwards 1974:12).

But some opponents of the IVF technology appear resolute to the demand for absolute safety from risk of harm, given the fact that the unconceived is intentionally being brought into a possible harmful existence without its consent. On this score the objection is expressed that: To manipulate a patient into being requires at least the far more stringent requirement that to do this we must know that every possibility of damage from the procedure itself has surely been foreclosed (Ramsey 1972:1349).

But not all would agree with Ramsey's stipulation for the obvious reason that none of us in our present states was consulted prior to our conception and birth. With this sort of reasoning, Fletcher rejoins that "the absurdity of" any

objection such as Ramsey's above, is appreciated simply by remembering that babies produced in the coital-gestational or natural way could not have given their consent either (1988:95).

Still some other advocates of the IVF/ET process argue that the demand for consent from the child to be born necessarily "leads to total negation - even to denying a mother a sleeping pill, a cesarean section or an amniocentesis for fear of disturbing the child (Edwards 1974:14). John A. Robertson argues along these lines when he writes that "preventing harm would mean preventing the birth of the child ..." (1994:75-76).

This argument is more forceful given the fact that, "every medical treatment from eating aspirin to open-heart surgery, carries a risk for each patient, and fetuses are not asked before hand about their own conception" (1974:14).

The arguments of Fletcher and Edwards on the consent issue with reference to various deformities a child from natural method of conception seem to justify at least similar risks of possible deformities that may arise from IVF/ET.

For the purposes of this dissertation, it will be assumed that in every instance of IVF/ET the parents of the embryo are fully informed of all important medical facts about their own condition, the nature of the IVF/ET procedure and the possible outcomes of the procedure and

their respective likelihood. It also will be assumed that the parents consent to the procedure voluntarily and for the sake of their own and their future child's benefits. In this way, we can focus specifically on the morality of the IVF/ET procedure itself, rather than being distracted by the important, but distinct issues of informed consent in medical decision-making.

What the technology is likely to lead to.

Aside from the direct potential benefits and harms of IVF/ET itself there is another kind of objection to the use of this technology. This objection derives from a fear of what the technology of IVF/ET will lead humankind to. At the core of this argument are certain negative projections about the effects of medical advances involving IVF/ET.

These projections seek to alert the public of the latent dangers of the new reproductive technology and if possible ask for a ban on the intervention. In these arguments, there is a shift in the direction of the arguments against IVF/ET from considering the "uses" of the technology to considering its possible "abuses."

It is feared that IVF/ET technology, even if good in itself for the treatment of infertility, nevertheless might act as a stepping stone to more dangerous technological innovations. For example, there is no guarantee that an embryo fertilized in vitro, will "be implanted in the same

woman from whom the egg was obtained" (Kass 1985:59; McCormick 1978:1462; Watson 1974:73), and this obviously raises an independent ethical question (McCormick 1978:1462).

There may be "women with uterine abnormalities that preclude normal pregnancy" who "may seek surrogate gestational mothers" (Kass 1985:60). Similarly, there may be women who seek surrogate motherhood because they "don't want pregnancy to interfere with " their favorite sports" "enough poor women ... available to form a caste of childbearers, especially for good pay" (Kass 1985:60; Watson 1974:73).

Both the proponents and opponents of artificial insemination agree that surrogate motherhood, which the procedure sometimes employs, can bring conflict of interest between the biological mother and the gestational mother, about the child. For example, for one reason or another, either the surrogate mother or the biological mother could be disenchanted with the pregnancy and so seeks an abortion (McCormick 1978:1462 ;Edwards 1974:12). But these are distinct ethical questions from those at the center of this essay.

It is also feared that the technology will lead to a weakening of the marriage bond between husband and wife, or even encourage adulterous practices (Ramsey 1970:50; McCormick 1978:1462-1463; Westley 1989:85). Some critics fear that the technology will lead to two sharply

distinguished kinds of humans beings. Others fear its effects on people's sense of their genealogy or on such important social practices as inheritance (Jacobvits 248-249).

Other extensions of the technology beyond an infertile marriage exist. For example, single women such as widows, lesbians, homosexuals, could use the technology for their own purposes; and others might even use it for personal comfort and economic gain. These cases not only exemplify the many possible abuses of the reproductive intervention they also "raise the fear of directed breeding programs under a totalitarian regime" which may culminate in cloning (Kass 1985:61; Watson 1974:73; McCormick 1978:1462). Nevertheless, these arguments carry little or no force in relation to the ethics of IVF/ET procedures themselves. Some commentators in fact argue that pointing to these fears in order to call for total ban on the technology is simply refusing to look at hard questions of reproductive reality. The new reproductive technology is here with us for good, they optimistically claim. But in any case there are separate ethical questions here to be asked.

Against such fears that IVF/ET will lead to undesirable ends, however, the proponents of the technology debunk the fallacy of inevitability inherent in the arguments of their opponents. Thus they ask: has "nuclear physics led inevitably to the atom bomb, electricity to the electric

chair, air transport to bombers and hijackers, civil engineering to the gas chambers" (Edwards 1974:11)? Each of these developments depended on numerous choices along the way on which moral agents could have judged and chosen otherwise. There is nothing inevitable about it.

Another commentator words the same idea somewhat differently; "Should the cure of malaria have been withheld - because it has led to overpopulation? Should the development of penicillin have been stopped - because it kept alive soldiers fighting unjust wars" (Beatty 1974:62)?

Supporters of IVF/ET are claiming here that the successful introduction of IVF/ET technology does not necessarily mean that it will lead to unwelcome consequences. The fact that the technology may be misused, by people who make bad judgments or have evil ends in view, should not stop us from embarking on the good project that the procedure is meant to achieve.

Yet, at the same time, neither side of this debate defends a strong position. All the alternative possible futures they are envisioning must be carefully and plausibly articulated and evaluated, and then compared - both in terms of the benefits and of the harms they involve and in terms of their likelihood of occurring - and then those futures must be compared with the future likely to occur if IVF/ET is not developed. Only then will solid arguments about the future uses of this technology be available for study.

Cloning, another of the new reproductive technologies, is another example, and one of the most radical, of what the reproductive technology of IVF/ET might lead to. It has become a widespread belief among many scientists that not too far into the future, human reproduction will be possible by cloning. This knowledge has upset some thinkers while gladdening the hearts of others. Those who welcome this scientific development do so not only on the basis of its purported immediate benefit of helping childless couples to have children of their own (Watson 1974:73), but also on the general ethical ground that it "provides more good than harm" (Watson 1974:74).

On a wider scale, cloning of humans would be welcome because the technique, it is claimed, would offer one of the best avenues yet of unraveling the genetic and biochemical origins of certain killer diseases such as cancer (Watson 1974:75). The detection of serious recessive hereditary defects in the carriers (Glass 1971:28) is another of the many promises that have added prominence to the development of IVF/ET, and to cloning or other reproductive techniques. But at the present time, research on cloning is almost completely independent of the scientifically established methods of IVF/ET treatment for infertility. So supporting IVF/ET treatment will add little to the impetus for cloning research. Again, while cloning

raises many ethical questions, the link of necessity to IVF/ET is absent.

Need for appropriate laboratory research.

One other aspect of the benefits-based ethical debate about IVF/ET concerns its experimental or research side. The basic elements of the procedure are now commonplace, but research and reproductive innovations continue on today and raise some ethical questions in their own right. Central to the arguments on clinical IVF research is the possibility of unforeseen risks which this experimentation involves, particularly in regard to the human embryo.

Two kinds of research on human subjects can be distinguished. They are: "Laboratory" or "non-therapeutic research" and "Clinical" or "Therapeutic research" (Walters 1977:193). (1) Laboratory (non-therapeutic) IVF research is one in which the medical scientists "have no intention of transferring any embryo to the uterus of a woman for implantation, gestation and eventual birth" (Walters 1979:23). Commentators say that this type of research is purely for experimental purposes designed either for perfecting IVF technique or to gain improved knowledge about other medical problems involving the human embryo. What is most important ethically is that it will not necessarily be of any benefit to the embryo that is the subject of the research, (Walters 1977:193).

There are very complex ethical issues about research that is not expected to benefit a human research subject especially if any risk is involved. For present purposes, however, the focus will be on therapeutic IVF research because the issues parallel issues in IVF/ET itself.

(2) Clinical (therapeutic) IVF research "refers to the use of IVF and embryo transfer in an attempt to initiate a pregnancy and produce a child" (Walters 1979:23). This is therefore therapeutic research, conducted "primarily for the benefit of a patient-subject whether by prevention, diagnosis, or treatment" (Walters 1977:193).

Kass contends that the technology has not been subjected to serious questioning about the possible risks of harm to the conceptus, even before any clinical application of the technology to assist an infertile patient. For instance, Kass argues that very limited research had been carried out on animals. But even if sufficient and successful research have been carried out on animals, he argues, there still remains the probability that animal "experiments could neither rule out nor establish the risk of mental retardation for children resulting from experiments in humans" (Kass 1985:53). For there are differences between animal species. What works well in a primate or monkey might not work equally well in humans. Kass claims that laboratory testing of animal embryos does not give enough information about normality and that the

information it does reveal is too crude to assure safety for human embryos (Kass:53). Kass claims that the success so far achieved on animals without deformities lacks "systematic investigation" of various questions about serious or less serious abnormalities which could arise at birth or later after birth.

Kass points out a number of harms that the human embryo could suffer in IVF/ET experimentations. (1) Not only does "laboratory testing of human embryo" prior to their transfer not provide enough information about normality, it is possible that testing in and of itself can damage the embryos. (2) Not only do genetic tests on the embryos have the possibility of damaging it; but "there are few genetic tests... available for the doing" (3) Kass also notes that damage could be done to the embryo in the very process of transferring it into its mother's uterus (Kass 1985:52-53; Westley 1989:89).

Still some other authors point out that "using IVF as a means to produce embryos for experiments or as sources of tissues and organs subjects the embryos to pain" (Smith II 1990:25). Smith argues that this objection to IVF on the basis of the pain it will inflict on the embryos "would have considerable merit where experiments were conducted on substantially developed fetuses" (1990:25). On this issue, Smith points out that other writers contend that "conducting such scientific interventions with embryos in the first

several weeks of their development, such embryos probably do not experience pain, owing to the absence of a critical nervous system" (Smith 1990:25; Robertson 1988).

On the other hand, it is argued that medical progress is virtually impossible without experimentations that involves both human beings and animals (Edwards and Graber 1988:180). The implication of this claim is that the potential benefits of medical progress outweigh the potential harms to embryos, that will accompany the necessary research. Crucial to this claim, but rarely spelled out carefully by the disputants, are views about the moral status of the embryo itself. These will be discussed shortly.

In practice, the discussion of these issues takes place in relation to accepted ethical guidelines about biomedical research. For any experimentation involving human subjects to be morally justified, that experiment must fall within the following established ethical norms:

The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods or means of study, and not random and unnecessary in nature. [Nuremberg Code, 1947, RULE 2].

...It is essential that the result of laboratory experiments be applied to human beings to further scientific knowledge and to help suffering humanity...

In the field of scientific research a fundamental distinction must be recognized between clinical research in which the aim is essentially therapeutic for a patient and clinical research the aim of which is purely scientific and without therapeutic value to the person subjected to the research. [Declaration of Helsinki, 1964].

This review shall determine ... whether the risks to the subject are so outweighed by the sum of the benefit to the subject and the importance of the knowledge to be gained as to warrant a decision to allow the subject to accept those risks. [Protection of human subjects, DHEW, May 30, 1974.] (Walters 1977:194).

As Walters explains, the important and recurrent themes of these ethical guidelines are "risk-benefit and informed consent." Consequently, IVF research has been approached from the perspective of the "need" of individuals concerned. The risk-benefit or need question and the consent issues, however, would be without any real import, if there were not many infertile women who may benefit from the IVF research directly, and by extension society; or if there are other ways of relieving the infertility problem without recourse to research involving human embryos or as noted above, if the desire to have one's own biological child, were not considered a medical need (Walters 1979:25-26).

Based on the risk-benefit and need evaluations, it is now a common view, as has been noted that IVF research may be justified on the basis that "re-implantation of cleaving embryos into the uterus is the only method to help many patients who are infertile through tubal occlusion" (Edwards 1974"10). There is no doubt about the successes of applying IVF/ET on humans. As already noted, the number of successful live births speaks for the merits of this technology. From July 1978, when the first IVF baby was born, to present the technology has helped many infertile couples to reproduce as

many as over 150,000 children throughout the world (see Francois Olivennes et al 1997:284). But according to the Ethics Committee of The American Fertility Society the success rate for artificial insemination is not as certain as that of IVF/ET only "because lack of reliable data" (1986:34S).

To this kind of data Kass responds that the basis of the claim of success is that "the experience to date has been so encouraging with no ... reports of severe abnormalities" (Kass 1985:53). This encouraging experience notwithstanding, however, Kass still wants to suggest that the success is only partial, because (1) The number of children so far produced by *in vitro* and embryo transfer method is relatively "small" (although it is much larger in 1997 than it was in 1985 when Kass first wrote) and (2) the time within which the technology has produced some children is too short to make any conclusive statement on the issue and therefore the ethical, risk-benefit question should still be considered open (Kass 1985:53)

Thus the ethical argument about the justifiability of IVF/ET research rages on. It has been summarized here for the sake of completeness, but it will not be an independent topic of importance for the rest of this dissertation. Obviously, however, many of the positions to be examined later in the dissertation would also have important implications for the ethical debate about IVF/ET research.

Presuppositions: the status of the embryo.

As was noted above, fertilization is the fusion of sperm and ovum in the female genital tract. When this union of sperm and egg occurs outside the female reproductive tract, that is "within a glass" it is referred to as "in vitro fertilization" (Mastroianni 1978: 1448; Caplan: 1990:100). But regardless of its location, in a petri dish or working its way down the mother's fallopian tube towards her womb, the embryo is a living member of the human species; and the moral implications of this fact will be crucial for any ethical argument regarding it in connection with IVF/ET. So its moral status needs attention at this point before a detailed philosophical work of this dissertation begins.

The ethical issues involved in this topic are numerous and varied. It raises above all a fundamental question that is often worded as "when does human life begin?" But presumably what this question is trying to determine is the moral status that should be accorded to the embryo at its nascent stage. Some opponents of IVF technology claim that the full moral reality of human life begins at conception, "from the time the ovum is fertilized" (CDF 1987:14; Kass 1985:104-104; Ramsey 1972:1347; Smith II 1990:22). Accordingly, they hold that IVF, in and of itself; is immoral because of the loss and risks of loss of human

embryonic life which this technology sometimes involves.

Ramsey words the idea as follows:

Persons who believe that an individual human life begins with conception, or after the time of segmentation, or at implantation, or with the morphologically human fetus, or with heartbeat or ECG readings, or self-movement (or any time before birth) must regard experiments in vitro fertilization and artificial implantation as *ab initio* inherently immoral, because the physician must be willing to discard mishaps at any point in that span of time which do not come to the standard of an acceptable human being (1972:1347).

Thus, regardless of the stage of development of the embryo, the fact of its humanity, which recognizable from fertilization on, "ought to elicit our feelings of woe and respect" (Kass 1985:105). Since the embryo is a human being from fertilization, it is also "a person" from that moment of fertilization; that is, it is to be accorded the same moral status in our moral reflections as a fully functioning adult human being. "From that same moment his right as a person must be recognized" (CDF 1987:14).

Other commentators do not accept the idea that the embryo is a human being with full moral status. Some argue and challenge, on biological grounds, the view that morally significant human life begins at fertilization. For example, Edwards contends that fertilization of the ovum is simply incidental to the beginning of morally significant life

because various processes which are essential to the development of human life begin not at fertilization but long before ovulation. He concludes that "the potentiality for life must therefore reside in the unfertilized egg and all of its precursors" (1974:13). The process of the development of a human being up to fertilization and beyond it is progressively sequential, and the moment of fertilization is not exempt from this process as an especially privileged stage of human development. In the light of this therefore, there is an opposition to "the tendency to define absolutes such as giving full human rights to a fertilized egg" (Edwards 1974:14).

One of the major concerns of the pro-fetal-moral-status commentators is the deliberate creation and wastage of human life which IVF/ET processes appear to involve. Thus, arguing from a biological fact, Kass, points out that the embryo is alive and has stages of development which may guarantee its viability. Given this fact, the remaining human embryo after in vitro fertilization, rather than being respected and protected because of its humanity, is now being used for experimentation, and then discarded (1985:57-58). That is, some embryos are subjected to risks of serious harm and even death. This is morally inconsistent, Kass believes, with the embryo's moral status.

Other commentators explicitly assign neither "respect" nor "protection" to the embryo because on their view, it is

not a "person". In this connection, the issue of, when the biologically human fetus becomes a person is given another view. Three different criteria have been suggested as essential in assigning personhood to a being. They are: (1) "life" (2) "soul" and (3) "reason" (Fletcher 1988:135-136). Discounting elements 1 and 2, Fletcher appraises rational intelligence as the essential criterion without which the human embryo cannot qualify as a person. In this connection he says:

Humans without some minimum of intelligence or mental capacity are not persons, no matter how many of their organs are active, no matter how spontaneous their living process are. If the cerebrum is gone, due to disease or accident, and only the midbrain or brainstem is keeping 'autonomic' functions going, they are only objects, not subjects - they are its, not thous. Just because hearts, lungs, and the neurologic and vascular systems persist we cannot say a person exists. Noncerebral organisms are not personal. Something like a score of 20 on the Binet scale of I.Q. would be roughly but realistically a minimum or base line for personal status. Obviously a fetus cannot meet this test, no matter what its stage of growth (Fletcher 1988:137).

It will not be possible to fully resolve this issue of the status of the embryo in this essay. Instead, each of the views discussed will have its corresponding answer to this question.

Walters identifies another approach closely related to this issue, on the "naturalness" of IVF/ET: "namely whether the acts of IVF with ET themselves violate a natural order

or structure for human procreation" (1979:25). In response to this question some commentators have attacked IVF/ET as an artificialization, "rationalization and depersonalization" as well as a "dehumanization of the natural process of procreation, it is a degradation and an assault to parenthood and family life, all in an attempt to "manufacture... wanted, willed and flawless babies" (Kass 1985:71-73; 1974:48-50). For Kass therefore, the natural process of procreation is morally superior to in vitro fertilization and embryo transfer precisely because it is "natural" and embodies the mysterious (Kass 1985:72). Kass' claim may incline some people at least intuitively to sympathize with his position. However, his position is dismissed as question begging by Callahan because it fails to provide an acceptable rationale argument about what it is to be human - "an essential human nature" (Callahan 1971:98).⁶ Callahan also points out that an act can remain personal to be human act and can be depersonalized without leading to dehumanization (Callahan 1971:99-100).

In addition to Callahan's challenge to Kass, one might point out that Kass' claim that IVF/ET is an artificialized and rationalized attempt to manufacture wanted babies appears not to take into consideration the fact that children are not like property that one could simply want

. This response is to Kass' 1971 writing on IVF/ET, not to that of 1985.

own. Instead children are indispensable human values that are needed not just wanted for the continuation of future human generations. Kass therefore should not ignore the difference some philosophers make between "want" and "need". One thinker for instance writes:

There is a difference between wants and needs. ... The difference between them can, perhaps, best be put like this. Anything can (logically) be wanted for its own sake; but nothing can (logically) be needed for its own sake. To the question "what do you want that for?" it is possible to reply "I don't want it for anything. I just want it." But to the question "what do you need that for" it would never make sense to reply "I don't need it for anything. I just need it" (Duane Willard, 1987:50).

In opposition to the above views on the unnaturalness of IVF/ET, some other commentators think that it is not necessarily the case that the new technological method of manipulating human reproduction, is dehumanizing and depersonalizing. Nor would they think it is "inherently" inferior to natural means of human procreation. Instead they claim that the artificial or the technological may sometimes be superior to the natural. For example, sometimes medicine "'interferes' with nature's business; it 'manipulates' natural forces and tries to save our lives when nature left alone would finish us off with disease or deformity. In fact mortality is a natural process - so is pernicious anemia" (Fletcher 1988:34-35).

Against the views that IVF is an assault on natural parenthood and family, Edwards sees no reason why IVF should be condemned as unnatural and therefore immoral, if one bears in mind the aim of the technology which, is the transference of an embryo at its early stage of development into the womb of its mother, in an attempt to avoid incurable infertility which in turn can be seen as something unnatural in an important sense.

Responsibility for decision-making and the how.

So far, it is clear that both the natural and artificial means of human reproduction involves some risk of harm or deformity to the child to be, some important questions remain to be asked. Some of those questions are: Is the decision to reproduce children the sole responsibility of married couples? Is it an issue to be regulated by law and society?

Many thinkers have pointed out that "right" is a complex concept to define philosophically. For example, some authors say: "No simple definition of the form "a right is a ... can adequately explain this complex concept" (David T. Ozar 1986:4); because "the concept of a right is a 'simple undefinable, unanalyzable primitive'" (Joel Feinberg 1980:149). The difficulty in exercising one's rights to make decision to reproduce becomes very obvious in the ethical issues which arise from IVF/ET method of reproduction.

In cases of using IVF/ET to alleviate infertility the difficulty of assigning rights arises because more than one party is involved in the decision of couples to have children who may be harmed by this decision.

Some of the advocates of IVF/ET believe that "the law should not be used to decide the value or hinder the progress of work on curing infertility. This should especially be so where it concerns husband and wife (Edwards 1974:16); nor should it be used to challenge the right of couples to have children of their own, "provided there is no conflict with accepted restriction on marriage, such as incest (Edwards:1974;16). Nor should any law be used to restrict couples with serious recessive genetic diseases from having children of their own (Lappe 1974:145). If this law is generally enforced then it simply will conflict with the right and interests of the infertile couple and therefore their desire to have a genetic child of their own. More importantly it will scare doctors as third parties away from helping infertile couples to have children (Edwards 1974:16).

On the other hand, those who believe that use of IVF/ET technology is profoundly immoral have proposed that laws be enacted to prevent it. For example CDF says:

"the new technological possibilities which have opened up in the field of biomedicine require the intervention

of the political authorities and of the legislator, since the uncontrolled application of such techniques could lead to unforeseeable and damaging consequences for civil society (1987:35).

Still another aspect of this topic arises from the fact that more legal rights are now being given to fetuses which allow them "to bring actions while still in utero for the death of the father or where parents or agents acting for stillborn fetuses receiving fetal injuries while in utero, were actions against those causing the injuries (Edwards 1974:12). This pattern certainly complicates the moral issue of the right of couples and their unborn or unconceived fetuses. Walters gives a short list of pregnancies which in some form, jeopardizes with the future life of the unborn in varying ways and which upon careful reflection could attract the use of law to protect the right of the unborn to a normal healthy life:

- . The wife in an infertile marriage takes hormones treatments in an effort to become pregnant.
- . An infertile couple requests the use of artificial insemination with the husband's sperm in the hope of having a child.
- . A couple in which the wife is over 40 decides to conceive an additional child, knowing that the risk of chromosome abnormalities increases with the advancing natural age.
- . A couple in which both members carry a recessive genetic trait for a serious disease decides nonetheless to conceive a child.
- . A couple living in abject poverty with inadequate

food and housing decides to have a child (LeRoy 1979:29).

Nevertheless, there does not seem to be a good reason to identify an advocate at law for every embryo, since in the ordinary case both parents and health care providers have the well-being of the child conceived through IVF/ET technology well in mind. In any case this issue is not the focus of this study.

For the purposes of this dissertation, in order to focus specifically on the morality of IVF/ET technology itself, it will be assumed that the proper responsibility for decision-making about the use of this technology rests with the husband and wife together with the physician or medical team who would provide it. It will also be assumed that no regulation of this procedure by law - except insofar as laws already ensure the safety of ordinary medical treatment, protect contracts between parents and doctors etc., should be considered until the issues under consideration in this dissertation have been resolved, namely the morality of the IVF/ET procedure itself.

A philosophical analysis

Finally, although the ethical considerations of IVF/ET has been argued for or against from many theological perspectives especially "of marriage, parenthood, and the family" (McCormick 1978:1458), it is nevertheless as a

philosophical issue that ethical implications of IVF/ET will be discussed here. In the light of this, this essay will now turn a brief attention to the main philosophical theories of ethical reasoning which underlie and accentuate the various positions in the debate about this specific technically assisted means of human reproduction.

CHAPTER TWO

A REVIEW OF RELATED ETHICAL PRINCIPLES

Introduction

From the dawn of philosophy to the present, Plato, Aristotle, Thomas Aquinas, Immanuel Kant, David Hume, Jeremy Bentham, and John Stuart Mill, stand out among other philosophers as some of the most gifted intellectuals the history has ever known in ethical philosophy. The question about the foundation of moral actions was central in their individual philosophies, and succeeded in dividing "them into sects and schools carrying on a vigorous warfare against one another" (Oskar Piest, 1957:3). This work will therefore be inadequate without an examination of some of the ethical principles of human actions which defenders and opponents of IVF/ET have variously employed in their writings on the issue. Three distinctive ethical theories can be identified as resonating through the review of the literature above. They are: (1) the natural law ethical theory, (2) consequentialism/utilitarianism or proportionalism (3) deontologism. Other ethical approaches, some of which are variations of the above three, will also be reviewed briefly.

In this chapter, the author will first sketch out the basic tenets of the ethical approaches. Then he will see how they have been applied in the arguments about IVF/ET. Their individual relevance to this project will determine the extent which any of the theories will be made use of.

The natural law ethical principle

What is Natural Law? An investigation into natural law ethical theory would imply first an inquiry into the philosophical meaning of the term, "nature". Thus rather than ask what is natural law?, our question should first be, what is "nature". This step of inquiry is taken because some authors have pointed out that a great deal of the ambiguities one finds in the theory of "natural law" is due to the failure among authors to clearly delineate the meaning of the term "nature", from which natural law ethics takes its origin (Punzo 1983:22; Vacek 1992: 330).

Nature in its most general sense can be seen on the one hand as the totality of the universe. On the other hand it can also "refer to the laws and principles of structure by which the behavior of things may be explained" (Paul Edwards 1976:454). In the first of these two senses, everything in the universe whether animate or inanimate, including the laws which keep them in existence is subsumed under the term nature. This implies that particular things in the universe not only are aspects of nature as a whole, but also have

their individual laws by which they operate and remain in existence. It is "nature" in the second sense that concerns us more here. But nature in the first sense will will also be relevant. "Nature" as the term is used in natural law theory "refers to the intrinsic principles of human growth including our biological, psychological, intellectual and religious dimensions" (Edward Vacek 1989:330).

In an attempt to illuminate the meaning of the term "nature", the "natural" is contrasted further with the "supernatural", which is a belief in an other worldly reality, (Philip Goetz 1991:400). Belief in an other worldly reality, has come about from experiences of miraculous events which happened and "which it is claimed the power and laws of nature could not bring about" (Paul Edwards 1967:454). It is also contrasted with the "artificial" literally that which is "made by (human) art." That is, insofar as the characteristics and principles of functioning of anything are the product of human purposes and human creation, it belongs to a third category in addition to the natural and the supernatural. The things which affect human life therefore include the artificial, the natural and the supernatural.

Aristotle on nature.

A more complicated meaning of "nature" seems to have been expounded by Aristotle. "Nature", Aristotle says, has

many senses. In order to grasp the philosophical sense of this term, Aristotle also contrasts it with what is "artificial". The natural is that which embodies within itself an innate principle by which it has the ability to move itself or keep itself at rest. The artificial on the other hand is that which lacks an innate power by which to move itself or put itself at rest. For example, artificial things cannot reproduce themselves (Aristotle, phy. 192a 12-27). In every natural thing that exists then, there is an underlying principle or power called its "nature" which determines the process of and brings it to its maturity, and thus affects everything else it does and everything that happens to it. "We also speak of a thing's nature as being exhibited in the process of growth by which its nature is attained" (Aristotle phy. 193b14).

This sense of nature could be seen as teleological; that is, the end towards which a thing is aimed as its goal.

Aristotle, gives other accounts of the term "nature". First nature is conceived as "the immediate material substance of things which have in themselves a principle of motion or change. The second conception of nature is that nature is "the shape or form which is specified in the definition of the thing" According to some authors (W.D. Ross 1923), the latter account is held by Aristotle as a more accurate account of what nature is, than the former materialistic account or conception of nature.

Ross said that Aristotle takes this position because he thought that a thing can only be known as this or that thing if it has a form by which it can be defined. And this can only be so if the thing in question is actually in existence not in potency. This is to say that no one knows the nature of a thing as it is in potentiality but only as it is actually. "The form indeed is 'nature' rather than the matter; for a thing is more properly said to be what it is when it has attained to fulfillment than when it exists potentially" (Aristotle, phy.193b7-8).

Aristotle raises two other noteworthy notions, "means" and "end" as objects of knowledge in relation to the nature of a thing. He notes analogically that what "means" is to an end, is what "matter" is to "form." What is of special importance here is that "means" is not separated from the end towards which this means is aimed at. Ross points out that, nature as form of a thing is the end towards which its development moves; while nature as matter is the means by which this end is to be realized (1923:71).

From this, one can draw the general conclusion that everything which has an end necessarily has a means towards that end and without which that end cannot be realized. In this sense one can conceive "nature" as final and formal cause, or nature as an end on the one hand; on the other hand one can also see "nature as means (Aristotle 194a27-28; 1044a35).

Ross explains why Aristotle gives the foregoing highly abstract account of "nature." According to Ross, Aristotle's aim is to distinguish physics, the science of the study of nature as matter and form, from the study of nature as pure form or as matter alone (1923:71). In the interpretation of Ross, God, the intelligences and the rational element in human soul are pure forms of nature which are the objects of metaphysics (1923:71), not physics for Aristotle.

Aristotle's idea of God as pure form will culminate in his idea of God as the first mover, eternal unmovable substance (Aristotle 1073a25-30). Some authors have noted that "Aristotle's Unmoved Mover stands to nature as its final or teleological cause, inspiring nature to imitate the divine activity as far as its various constituents are able" (Paul Edwards 1967:455).

Elsewhere Aristotle clearly indicates that "nature" has its own law, when he says that "universal law is the law of nature. For there is as everyone to some extent divines, a natural justice and injustice that is binding on all men, even on those who have no association or covenant with each other" (Aristotle, Rhetoric 1373b6-9). This law of nature, besides being universal, it is also "permanent and unchangeless" (Aristotle, Rhetoric 1375a31-32).

Does the above exposition of Aristotle's notion of nature give us any clear knowledge or understanding of the nature of reality as it is in and of itself and of the

nature of moral action? Can the "Unmoved Mover" which is identified with "Final Cause" or teleological cause be known objectively? These questions are important because they seem to underscore the contents of moral action; and in the case of this work, the morality of IVF/ET. They call for a study of human knowledge about what "is", and therefore what humans do with, or about the "is".

According to Aristotle, the condition for knowledge of anything is if we know the primary condition, of what he calls "first principle" (Aristotle 184a11-14). The grasp of this first principle of any existent reality, or what "is", is the preserve of "intuitive reason" (Aristotle Nic. Ethics 1141a7). Aristotle contends then that anything that has a cause outside of itself can be known by demonstration; however, the cause of its being what it is itself (in other words, its substance or nature), cannot be demonstrated (PoAquinas Analytics 93b15-20).

Elsewhere in his moral account Aristotle says that the essential nature, that is the first principle of human action is known only through intuitive reason (Nic. Ethics 1141a7), rather than by demonstration, or logical proof. This is to say that first principle of human action, which is crucial for judging an action as good or bad, praiseworthy or blameworthy, right or wrong cannot be known by any physical observation or logical proof, but only by "intuitive reason." It will be interesting to know whether

"nature" as the first principle of human action is, in and of itself, "good" and "right" and for this reason can be called "the good and the chief good ... what is right" (1094a20-24).

For a clue to the issues just raised this author turns to Aquinas, a philosopher whose ethical thought is rooted in "nature" as having a "law".

Thomas Aquinas on natural law.

The attempt to understand the philosophical meaning of the term "nature", was necessary for an excursus into Aristotle's treatment of that term. In a similar vein, it seems necessary to know what Thomas Aquinas thought of "Law", since some authors claim that he is the father of natural law (Boyle 1992:4). Furthermore, Aquinas has a specific treatment of the essence of law. An understanding of the essence of law will help to illuminate its relationship with the essence of "nature". When this is done then we can combine "nature" and "law" into the notion of natural law and illuminate Aquinas' development and application of "natural law" philosophical theory to human actions.

Aquinas' joining of nature and law would be arbitrary, if Aquinas was not in agreement with Aristotle's understanding of "nature" in its various denotations. On this condition therefore, it is the opinion of this author

that in general, except with some Christian qualifications, Aquinas is in conformity with Aristotelian view of the nature of reality and of the role of nature (Aquinas, On Being and Essence 29-72).

To the question, what is law? Aquinas first distinguishes the different kinds of law namely, eternal law, natural law, human law, divine law, (Aquinas Ia IIae, q. 91: art. 1-6), and gives a descriptive definition of law in its most general meaning. He says that "law is a kind of direction or measure for human activity through which a person is led to do something or held back" (Aquinas Ia IIae, q. 90: art. 1). Aquinas then notes that both "direction and measure come to human act from reason". Citing Aristotle's notation that the function of reason is to plan for an end, Aquinas concludes in consonance with Aristotle, that reason is the originating source of human actions; and that "law is something that belongs to reason" (Aquinas Ia IIae., q. 90: art. 1).

More particularly, taking the effect of law into account, he says: "law is nothing but a dictate of practical reason, issued by a sovereign who governs a complete community" (Aquinas Ia IIae, q. 90: art. 1 and 2). Aquinas took it for granted that "the world is ruled by a divine providence" (Aquinas Ia IIae, q. 22: art. 1 and 2), and that "it is evident that the whole community of the universe is governed by God's mind" (Aquinas Ia IIae, q. 91: art. 1).

Hence by virtue of the universal rule of things by divine reason, this divine reason "has the nature of law" (Aquinas Ia IIae, q. 91: art. 1), and has "eternal" conception because, God's mind or reason, pre-exists time or the temporal (Aquinas Ia IIae, q. 91: art. 91). This explains why divine reason, which is tantamount to law, "should be called eternal" (Aquinas Ia IIae, q. 91, art. 1).

Having established divine reason as the eternal and universal law or principle, which directs everything, Aquinas proceeded to show that there is also law in the natural world, a "natural law". The following is Aquinas' derivation of natural law:

Law is a rule and measure, ... and therefore can exist in two manners, first as in the thing which is the rule and measure, second as in the thing that is ruled and measured, and the closer the second to the first the more regular and measured it will be. Since all things are regulated and measured by Eternal Law, ..., it is evident that all somehow share in it, in that their tendencies to their own proper acts and ends are from its impression.

Among them intelligent creatures are ranked under divine Providence the more nobly because they take part in Providence by their own providing for themselves and others. Thus they join in and make their own the Eternal Reason through which they have their natural aptitudes for their due activity and purpose. Now this sharing in the Eternal Law by intelligent creatures is what we call 'natural Law.'...the light of natural reason by which we discern what is good and what evil, is nothing but the impression of divine light on us (S.T.Ia IIae, q.91, art. 2).

Natural law, therefore is the means through which all existent is ruled by eternal law; that is by divine mind or reason. On the one hand it is eternal law as a principle of action, as nature, in every natural being. On the other hand natural law is the understanding by which humans intellectually comprehend eternal law and guide their own actions accordingly, giving them rational order (law) according to human nature.

Aquinas then asks whether, this eternal law, as God's "wisdom", or "reason", or "idea" is known by everyone. His answer to this question is qualified. "No one, except God himself and the blessed who see him in his essence, can know the Eternal Law as it is in itself, but every rational creature can know about it according to some dawning, greater or lesser, of its light" (Aquinas Ia IIae, q. 93, art. 2). One notes also that, the eternal law as God's reason or idea is seen as an "unchangeable truth" (Aquinas Ia IIae, q. 93 art. 2).

From the point of view of the above, there is no doubt in Aquinas' view that every human being, one way or another, with his or her reason which is a share in divine reason, knows something that is true solely by its participation in eternal mind or reason, which is an "unchangeable truth" and "law". This is what Aquinas refers to as the "general principle of natural law" (Aquinas, Ia IIae, q. 93, art. 2). But what must not be forgotten among the interpreters and

users of natural law theory is that "people share in the truth in varying degrees, and accordingly know the Eternal Law, some more, some less" (Aquinas Ia IIae, q. 93 art. 2).

It is of special interest and importance to note that Aquinas distinguishes the way irrational creatures are subject to the eternal law, from the way rational creatures are subject to it. Irrational creatures obey the eternal law by being moved by the power of the law itself as it is impressed upon them by God in a given and fixed manner (their nature). Rational creatures are also subject to the eternal law but in a different way. They obey this law through the means of "understanding," that is by intellection or reason.

With this Aquinas asks whether natural law has many or only one principle by which creatures act (Aquinas Ia IIae, q. 94, art. 2). Due to the relevance of his answer to this important question, in relation to the ongoing discourse about IVF and artificial insemination, some of the details of his long reply need attention here.

(A) He says that there is only one precept of the natural law (Aquinas Ia IIae, q. 94, art. 2), because firstly, law of itself is a precept. Secondly he says that law as a natural consequence of human nature, must have a single precept because man though he is a unity, is complex because he has many parts. This seems to imply as Aquinas suggests that the single precept of law in the unity of a

person is represented in the many parts of the human nature, including man's sensuous parts. In this way natural law may seem to have many precepts. Thirdly, Aquinas argues that natural law has only one precept because, law is derived from reason which is only one (Aquinas Ia IIae, q. 94, art. 2).

(B) Aquinas also has an answer from the point of view that natural law has many precepts. It is widely accepted that it is Aquinas' position that natural law has many precepts (Grisez Germain, 1969:343).

Aquinas then addresses the point that natural law has many precepts by drawing an analogy between the principles of natural law and the first or self-evident principles of demonstration. For him, what the principles of natural law are to practical reason, are what the axioms of science are to theoretical reason because both are kinds of self-evident principles (Aquinas Ia IIae, q. 94, art. 2). For Aquinas certain things are self-evident to everyone, while others are not self-evident to everyone.

What is meant by "self-evidence"? As Aquinas sees it, a thing can be self-evident in two senses, namely "objectively" that is, in and of itself, and "relatively to us", that is as it presents itself to us or as individuals see it. For him a thing is self-evident if and only if, that which is said of a subject, belongs essentially or inseparably to the subject. In this sense whenever a

statement about what is self-evident is made, that which is said of the thing is immediately understood by anyone who has the understanding of that which is said of the thing or subject.

In another sense he says that, to anyone who does not have the understanding of that which is said of a thing, it is not self-evident to him (Aquinas Ia IIae, q. 94, art. 2). It is only objective in relation to the one who knows what is said of the subject. He judges for example that, "man is a rational animal" in itself, "is a self-evident proposition" because, "to say 'man' is to say, rational". Yet to someone who does not know what "man" is, this proposition would not be self-evident (Aquinas Ia IIae Q. 94, art. 2).

Aquinas distinguishes this kind of self-evident principle which is only known to some, from those that are known by everyone. For example, that "every whole is greater than its parts" is a self-evident principle which is known by everyone. Broadening his differentiation, he sets apart this type of self-evident principle from those known only to the highly educated. For instance to anybody who knows that an angel has no body, "it is self-evident that an angel is not circumscribed in a place". However this is not the case with those who do not understand the philosophical point about the relation of body and place (Aquinas Ia IIae, q. 94, art. 2).

In consideration of the class of things which are self-evident to everyone, Aquinas says that the first is "being", because being is an idea which is included in every statement about an existent thing; and human beings know automatically. It therefore needs no proof to show that such a thing exists. In other words, being itself is indemonstrable, it is not demonstrated by way of proof. Humans grasp it in another way.

Aquinas resonates with Aristotle by saying that the first self-evident principle in the realm of theoretical knowledge is that the same person at the same time can believe the same thing to be and not to be; hence this is naturally the starting point for all other theoretical principles (Aristotle Met. 1005b29; Aquinas, Ia IIae, q. 94, art. 2). The notion about self-evident principle plays a similar important role in Aquinas' natural law theory, and so it will in the ongoing discourse about IVF/ET. Aquinas holds that the first self-evident principle in thinking about how to act (practical thinking as opposed to theoretical thinking) is "do good and avoid evil" (Aquinas Ia IIae, q. 94, art. 2).

Aquinas draws a parallel between "being" in relation to "theoretical reason" and "good" in relation to "practical reason". He says that just as "being" is the first thing the human mind can grasp when it beholds a thing, (first principle of theoretical reason), so too "good" is the first

thing which "practical reason" inclines to in its activity. "Reason" is here called "practical" because it produces action, it does something. Moreover, like every agent it acts towards an "end", and the meaning of an end is precisely to be "good."

Aquinas concludes that the first principle of practical reason is based on the meaning of "good" namely that it is that which all things seek after (Aquinas, Ia IIae, Q. 94, art. 2). This establishes what Aquinas calls "the first command of the law, namely 'that good is to be sought and done, evil to be avoided'; all commands of natural laws are based on this" (Aquinas Ia IIae, q. 94 art. 2). Aquinas adds "Accordingly, then natural law commands extends to all doing or avoiding of things recognized by the practical reason itself as human good (Aquinas, Ia IIae, q. 94, art. 2); and to the avoidance and shunning of the apprehension of their contraries as bad (Aquinas q. 94, art. 2). On this rests the central contentions of the defenders of the natural law theory in its application to human reproduction, a contention which will be addressed much more fully later.

One may still ask the following question. From where does the notion of evil come into play, since reason in its theoretical functions can only behold "being" and "good" respectively; "good" being the corollary of "being"? At this point the age old question resurfaces, namely: from whence

came evil into the world? Given Aristotle's and Aquinas' notion of "being" as that which is the first principle of any existence, and its opposite as non-being or nonexistence, it seems problematic to establish the origin of evil. But this important question is well beyond the scope of this project.

The first reality which theoretical reason grasps is "being itself" "good" is the first thing which practical reason apprehends, in its natural inclination to do something (Aquinas Ia IIae, q. 94, art. 2). Of necessity these coincide in the end of every agent (Aquinas Ia IIae, q. 94, art. 2), an end which "carries the meaning of to be good" (Aquinas Ia IIae, q. 94, art. 2). That is, the "good" to which man is inclined through being apprehended by practical reason (in this author's deduction), coexists with the first reality of theoretical reason. For as Aquinas said earlier, before reason does something, it must first know what it does; and since what it is inclined to do is good, it must first be, in order for it to be known and be done. This is "reason" in necessary coincidence and cooperation with itself in its theoretical and practical self.

"Necessary coincidence" is here comparable to that inseparable unity between the Aristotelian "matter" and "form", or "means" and "end". It is not a mechanical cooperation between two independent beings. Instead it is the way to be of a being, what this author calls, being-in

goodness. This coincidence of being and goodness will prove to be important when one particular natural law argument about IVF/ET is examined later.

Now Aquinas observes a three tiered hierarchical order in the law of nature which corresponds with the order in creaturely natural tendencies. First, there is the human tendency towards the good of the nature which humanity shares in common with every creature, for instance, everything has the basic natural tendency to preserve its own being. In accordance with this law, those tendencies by which humans preserve their lives and defend them when they are under threat fall under this natural law. Secondly, there is in humans a certain inclination towards certain goods which are in accordance with their nature, but which they share only with other animals, for instance sexual intercourse, education of their offspring and so forth. Thirdly there is in humans, the special inclination towards the good of his nature which is proper or specific to them as rational beings. For instance, humans have the natural inclination to know the truth about God and creation and about their own natural ends and about living in society. Thus it is natural, in a very strong sense, for humans to shun ignorance and avoid offending those with whom they live in their society (Aquinas Ia IIae, q. 94, art. 2).

Aquinas' excursus into the question whether natural law contains many precepts or only one, ends with the following

conclusion: Although there are many precepts of the natural law, there is a convergence of the precepts into one precept which counts as one natural law. His explanation of this answer is that, the many precepts represent different emotional or irrational drives of human nature, which are then controlled by a single precept, reason, through its understanding of this threefold hierarchy of natural inclinations. In this way, all that is controlled by reason falls under the single control of the law of reason, hence, it can be said that natural law has only one precept (Aquinas, Ia IIae, q. 94, art. 2). When the many inclinations or directives to action (precepts) are in conflict, unity is established by reason, according to the natural hierarchy just mentioned.

One of the principal arguments against IVF and artificial insemination has been that the practice is unnatural and therefore immoral, according to some interpretations of the natural law ethical theory. This is why the work of the father of natural law theory needs to be examined here. Aquinas held that man acting according to his reason acts according to natural law and so according to his natural tendencies. The process by which reason does this is to go from the general to the particular, that is from what is known to everybody to individual details or particulars which are not known by everybody (Aquinas Ia IIae, q. 94, art. 4.; Aristotle Physics 184a1-25). However as was pointed

out above, theoretical reason and practical reason function differently in relation to reason's natural tendency, namely to know being or truth on the one hand and to do the good on the other.

As Aquinas saw it, theoretical reason concerns itself with natural truths which cannot be other than they are, and about which theoretical reason will always say the same thing either in general or in particular. To the contrary, practical reason which deals with human acts can come to different correct judgments in matters of particulars or detail, the universal general principles notwithstanding (Aquinas Ia IIae, q. 94, art. 4).

Aquinas said that truth is the same for everybody both in general and in particular in terms of theoretical rational knowledge even though it is to be recognized that not everybody recognizes truth in the conclusions, that is in general. But with respect to practical reason which deals with human acts, he said that practical truth and rightness are not the same for everybody with respect to particular decisions. Furthermore "even those who are equally in the right on some particular course of action are not equally aware of how right they are" (Aquinas Ia IIae, q. 94, art. 4). Aquinas' summarizes these points in this way:

So then it is evident that with respect to general principles of both theory and practice what is true or right is the same for all and is equally recognized.

With respect to specific conclusions of theory the truth is the same for all, though all do not equally recognize it, for instance some are not aware that the angles of a triangle together equal two right angles. With respect to particular conclusions come to by the practical reason there is no general unanimity about what is true or right, and even when there is agreement there is not the same degree of recognition (Aquinas Ia IIae, q. 94, art. 4).

As will be demonstrated below, those who conclude that IVF/ET is immoral on the basis of natural law reasoning have failed to take adequate account of this difference between theoretical and practical reason within natural law theory. They have also mistakenly held that, within natural law theory, every possible act is either prescribed or forbidden.

Now it is true that, for Aquinas, every act of reason is responsive to natural inclination, and so every rational act is virtuous (Aquinas Ia IIae, q. 94, art. 3). But virtuous acts considered in themselves are not all prescribed by the natural law because there are many virtuous acts to which humans are not naturally inclined directly, but which upon the examination of reason "have been found by men to be conducive to human well-living" (Aquinas Ia IIae, q. 94, art. 3).

Some of such acts Aquinas cites are: temperance in relation to food, drink, and sexual intercourse, and all of "which are indeed ordained to the natural common good, just as other matters of law are ordained to the moral common good" (Aquinas Ia IIae, q. 94 art. 3). What this means is

that a sound natural law judgment about a particular act of IVF/ET or about a specific social policy of supporting IVF/ET as an available treatment for infertility will depend on factors in the lives of the particular persons and in the life of their society that cannot be deduced from general theoretical principles.

What message does this analysis of human reason in its theoretical and practical functions, hold for those who apply the natural law ethical theory attributed to Aquinas to the ongoing ethical debate about IVF and artificial insemination? In particular, is what is true and right and good something relative for Aquinas? This question about relativism or subjectivism, is obviously of some interest in relation to the topic of this study. But before these questions are answered in detail, an examination into a second main ethical theory which is prominent in the current arguments about IVF and artificial insemination seems appropriate.

Deontological ethical theory

The Random House Dictionary of the English Language, defines Deontological ethics as "the branch of ethics dealing with right action and the nature of duty without regard to the goodness or value of motives or the desirability of the ends of any act" (1983). A review of this branch of ethics reveals more than one kind of theory. There is "act-

deontological theory"; "Rule deontology"; "the divine command theory"; and "the Kantian theory" (William K. Frankena 1973). The contents, similarities and differences between these components of deontological ethics can be shown by a brief survey of each.

Act-deontologism

The thesis of act-deontological theory is that "the basic judgments of obligation are all purely particular ones such as, "In this situation I should do so and so," and that general ones such as, "We ought always to keep our promises" are unavailable, unless, or at best derivative from particular judgments" (Frankena, 1973:17).

Act-deontologists hold the general position that there is indeed a duty to do what is right and to abstain from what is wrong. However, they maintain that each act or situation must be decided according to its own individual merit without any general rule to guide us to action, because "each situation is different and even unique" (Frankena, 1973:16, 24-25).

According to Frankena, its method for the determination of the morally right or wrong is to be "clear about the facts in the case and then" form a judgment about what is to be done, either by some kind of "intuition" or "decision" (1973:23), depending on one's choice.

Intuitionism is the epistemological philosophical view that our basic moral principles for the evaluation of human actions as right or wrong are both "self-evident" and "self-justifying" (Frankena, 1973:102). As one might expect, objections are raised to this view.

According to Frankena, intuition as a principle for moral judgment has serious difficulties. One difficulty he says is based on the findings of human physical and psychological sciences. Frankena, says that anthropological and psychological evidence run counter to the intuitionists' position, because there is no special faculty which perceives what is right or wrong as it is in itself. Another argument against act-deontological ethical theory has been advanced by R. M. Hare:

...to learn to do anything is never to learn to do an individual act; it is always to learn to do acts of a certain kind in a certain kind of situation; and this is to learn a principle. ... without principles we could not learn anything whatever from our elders. ... every generation would have to start from scratch and teach itself. But...self-teaching like all other teaching is the teaching of principles (R. M. Hare, 1952:60-61).

On the basis of the foregoing objections act-deontologism is declared untenable by its opponents. It would, in any case, provide no general guidance to individuals or societies regarding IVF/ET. Therefore, it will receive no further consideration here.

Rule-deontologism

This kind of deontological ethical theory maintains that understanding a "rule" is a necessary condition for the determination of the rightness or wrongness of any given moral action. One of the usual examples cited for this kind of deontologism is "we ought always to tell the truth" or "keep your promises" (Frankena 1973:17). Unlike the act-deontologists, rule-deontologists insist that rules are the foundation and reference points for the judgment of the rightness or wrongness of an individual action.

A very similar form of moral reflection employs rights as the foundation of moral judgments rather than rules. Some important issues regarding IVF/ET are currently debated in terms of rights; for instance, a couple's proposed right to have children by any means they choose. In the present general context of discussing ethical theories, however, it seems best to consider rights-theories as a sub-class of rule-deontological theories.

One general objection to this theory, argues that there can be no rule or right which does not admit of exceptions, nor is there any set of rules or right which does not admit of conflicts between the rules (Frankena, 1973:25). To this difficulty, according to Frankena, W. D. Ross suggests a way out. He distinguishes between "actual" duty and "prima facie" duty, between what is "prima facie" right and what is "actually" right (Frankena, 1973:26). It is contended that

what is actually right and obligatory is what we actually ought to do in a particular situation while prima facie rightness will identify what might be called "candidates" for rightness, which must then be reflected on further to determine which of them is actually right.

According to Frankena, "something is a prima facie duty if it is a duty other things being equal, that is if it would be an actual duty if other moral considerations did not intervene" (1973:26). So discussions of what ought to be done or what social policy, for example, regarding IVF/ET ought to be supported would have two parts: (i) determine what prima facie rules or rights are involved; (ii) address their conflicting requirements if any.

But now we must ask if the distinction between actual and prima facie rules and rights has gained us any insight into how these conflicts, when they occur, are to be resolved. One possibility is that the rules or rights are weighed or ranked in some way; another is that the foundation of moral thinking is in fact one master rule or one supreme right. The approach of Kant, to be discussed in a moment, is one example of the latter. The most common way of ranking rules is in terms of their consequences, or the good that they do. The consequentialist approach will be examined after Kant.

It seems that little or no explicit attention at all has been paid to this notion of prima facie duty in the

current debate about the possibility of helping infertile couples to have children of their own through the technological intervention of IVF and artificial insemination. What rules of duty or right might guide infertile couples who desire to have children of their own genes? Are there rules constraining them from using the new inventions of human technology or rules requiring their use? What moral considerations about the status of the human embryo might intervene on their prima facie duties to require or to prevent a couple from making use of the only means of reproduction available to them? Are there prima facie rights of the human embryo or prima facie rights of its parents? For the parents have means for the choice of the possibility of the life of the child. Some of the prima facie rights of the embryo might include: the right not to be deformed, the right to enjoy full dignity due to a human embryo, or as some would claim the dignity of the human person. But it is not generally in these terms only that opponents or defenders of IVF/ET have formulated their arguments, so this approach will be mentioned only in passing in this essay.

The divine command theory

The divine command theory also called "theological voluntarism" is another form of deontological ethics. As the name suggests, the tenet of this theory is that "the

standard for right or wrong is the will or law of God" or in other words that "an action is right or wrong if and only if ... it is commanded or forbidden by God and nothing else" (Frankena, 1973:28).

It is not hard to see that this theory will meet with serious challenge particularly from the point of view of an atheist or agnostic; nor is it hard even for a believer to see some of the difficulties it involves. One of such problems, is as old as ancient Greek philosophy, and has been associated with Socrates in Plato's dialogue, Euthyphro. It is: "How can we know what God commands or forbids (Frankena 1973:29)?" Recall also another question attributed to Socrates; "Is something right because God commands it or does He command it because it is right (Frankena, 1973:29)?" The Socratic reply to this question was that "God commands something because it is right." The important point which is to be noted here is the implication of this answer, which is that "what is right is so, independently of whether God commands it or not, or, in other words, that God only reveals what is right and does not make it right or create its rightness merely by willing it" (Frankena, 1973:29). So the divine command theory actually does not get us very far. Even if God does reveal what is right, what is right is so, whether or not God commands it.

So, the question persists: How does anyone know what is right where what is right can presumably be known, both by believers and unbelievers in God? Therefore, the divine command theory will provide little assistance to this project, and will not be pursued further. Many proponents of natural law ethical theory have also seen a theological grounding for human moral life. The best of these have seen the inadequacies of the divine command theory and offered other explanations of the relation between human morality and the divine. But since this is a philosophical analysis of the morality of IVF/ET, these religious and theological accounts will be left out of consideration.

Kantian deontological ethical theory:

No short summary of the highly complicated and monumental work of Kant's ethics can capture its philosophical content in its entirety. But this is not to say that nothing worthwhile can ever be said about it succinctly. An attempt will be made to extract and present here those ideas in Kant's moral philosophy which are commonly regarded as central to his ethical theory and which may shed light on the issues under discussion here.

According to Kant,

(1). "Nothing in the world-indeed nothing even beyond the world-can possibly be conceived which could

be called good without qualification except a good will....

The good will is not good because of what it effects or accomplishes or because of its adequacy to achieve some proposed end; it is good only because of its willing, i.e., it is good of itself.... it would sparkle like a jewel in its own right, as something that had its full worth in itself. Usefulness or fruitlessness can neither diminish nor augment this worth ([Kant] Lewis W. Beck, 1959:9-10).

Simply put, the good will is the absolute condition for the good. This reminds one of the biblical injunction which says that from the abundance of the heart the mouth speaks. A good will therefore is the sole condition for the qualification of any human action as good or morally right. Also, in Kant, one reads:

(2). [Thus the first proposition of morality is that to have moral worth an action must be done from duty.] ... An action performed from duty does not have its moral worth in the purpose which is to be achieved through it but in the maxim by which it is determined. ... Duty is the necessity of an action executed from respect for law. ... To duty every other motive must give place, because duty is the condition of a will good itself, whose worth transcends everything ([Kant] Beck, 1959:16-20).

How can we know that a will to act in a certain way is a good will? Kant believed that there is a single law of morality which ought to guide humans in their actions. This law he called the "Categorical imperative" because it is not based on any condition or desires.

(3). There is therefore only one categorical imperative. It is: Act only according to that maxim by which you can at the same time will that it should become a universal law. ... The universality of law according to which effects are produced constitutes what is properly called nature in the most general sense...then the universal imperative of duty can be expressed as follows: Act as though the maxim of your action were by your will to become a universal law of nature ([Kant] Beck, 1959:39).

Kant however recognizes that there are different kinds of duties: "duties to ourselves" as distinguishable from duties "to others," and that all of our duties do not hold equal value, hence he distinguishes also "perfect and imperfect duties" ([Kant] Beck 1959:39).

Kant also argued that other imperatives for duty can be derived from the categorical imperative hence the following two other imperatives:

(a). Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only [Kant] Beck, 1959:47).

(b) Every rational being must act as if he, by his maxims were at all times a legislative member in the universal realm of ends ([Kant] Beck, 1990:57).

Since H. J. Paton's interpretation and analysis of Kant's moral philosophy is widely respected (Frank, N. 1990:343) the use which will be made of Kant's ethical theory in this section shall be based on Paton's view of Kant's moral philosophy.

For the purposes of this work, the essay limits self to the use which both proponents and opponents of IVF/ET have made of the Kantian or deontological ethical theory in general. First, these technologies are under focus as a "means" to the achievement of an "end"; a child. What is the moral value of these reproductive technologies in a non-consequentialist theory of morality?

One may be skillfully "a good doctor or a poisoner" (Paton 1951:162). This is to say that one can be skillfully good or skillfully bad. As Kant sees it, actions are only good for the realization of the law as such (1951:169). This is to say that even if an action as skill is the means with which a good end is realized, this does not necessarily mean that the action is good per se.

Following the foregoing line of thought, however, opponents of the new means of human reproduction could therefore conclude that the new means of human reproduction may not necessarily be right or good just because it produces a good end. However, proponents of the technology in question may revamp the argument in another way. In accordance with Kant's moral theory, what is important is that an action is good and right on the basis of the principle with which it is willed; "a principle of universality and so of impartiality between myself and others" (Paton 1951:168).

On this view therefore one stands in the best position for a moral evaluation of in vitro fertilization and artificial insemination in specific relation to infertility among married couples and the medical scientists who are engaged in the progress of the technology. This specificity is re-enforced in a culture such as in Nigeria where child bearing is one of the primary reasons for marriage and therefore the indispensable "form" and "value" of marriage. This value of marriage (children as the end of marriage in the Nigerian culture) among other values will therefore play an important role in the evaluation of the morality of the use of IVF/ET as the best available means for infertile couples to bear their own genetic children.

The role of culture

Can one presume that what is right is relative to individuals or a community of people? The pertinence of the foregoing questions takes its propriety and importance within this author's examination of the human experiences of the problem of infertility and the new reproductive technology of IVF/ET, which seeks to alleviate this problem. In other words, how does one know what is "good" or "right", "bad" or "wrong", in and of itself? How can one distinguish good laws of nature from bad laws of nature when both laws produce the same thing?

It seems that the ethics of the new reproductive technology is first and foremost the question of human knowledge. The question, what do we know? comes before the question, is what we know right or wrong, good or bad? To what do humans attribute what they know, and therefore what they do? How does humanity grasp the laws of which it has no concept? How can we ever say or represent anything if we have no idea of what we are saying or representing? Thus to obey a law, we must have the concept of the law and its properties.

Aristotle and Aquinas argue that, what the first principle of theoretical reason grasps first is being while what the first principle of practical reason has the first tendency to do is good. If this thinking is correct, there follows then a logical question: where in the first time-bound place, does the individual or a community of people behold being, with their own eyes, grasp what it is or means with their own mind, determine what to do in relation to this being or good with their own mind and will and carry out their own determinations with their own hands; guided by their own reason, the reason of which they shared with other members of the human race from "eternal reason" or "law of nature"?

It is the belief of this author that it is no place other than in the individual's or community's own "birth home", his or her first environment, that is the environment

into which the individual was born, in which he or she has grown, and developed all the recognized faculties that qualify a human being as a human person, yes, the individual's habitat or as it is commonly called, the individual's or community's culture. It is in this environment that the cultivation and sharing of primary concepts of "right" and "wrong", "good" and "right", "bad" or "evil" and "wrong", takes its meaningful inception. It is therefore, this culture, that will determine for itself the appropriateness or otherwise of the use of IVF/ET. But first, we must ask: is there a need for this technology?

Opponents to this general idea will be quick to spot that it sounds like relativism. Yes, it sounds like one; but is it one? The reply to this question is suspended to a later time in this work. Before then here is a required home-work for the opposers to position. It is this: Why is the history of philosophy laden with more than one ethical theory, and which do you accept without condemning the other or others and for what reasons?

In the face of the multiplicity of deontological ethical theories, the task of applying deontological ethical theory to IVF/ET becomes even more problematic. With this, it is time to review the last important deontological ethical theory, the Kantian version.

It is time then to examine the "objectivity" or "absoluteness" of an action or the "subjectivity" or

"relativity" of an action. The first question that thrusts itself upon us in this inquiry is: Can an action be said to be good and therefore morally right only from one point of view? Or put in another way, can a human action derive a positive moral meaning only from one perspective? It appears that an obvious reply to these questions is not in the affirmative. There are many different ways of viewing and accomplishing a task rightly.

If the above is true then one may ask, can a single action be both good relatively and universally; or both right relatively and universally? In what ways can one's action be said to be subjectively good and right and objectively good and right? The foregoing questions are very Kantian and are derived from the following: "Can I will the proposed action, not only as falling under a subjective principle valid merely for myself, but also as falling under a law valid for everyone in a similar situation?" (Paton 1951:170). In Kant's view, according to Paton, one must start with the maxims which are good for the person, that is with the subjective principle which "are concerned with the good for me" (1951:170).

In willing an end one is at the same time willing all the known and yet unknown means towards the attainment of the end which is willed. The series is like a succession of events. A thing while following from one preceding event, necessarily leads to another, until the desired end is

attained. As J. H. Paton has said, "Man does not will one thing as a means and another as an end" (1951:125). This view parallels that of Aquinas which holds that a means necessarily is connected to its end. That is, means and end involves not two separate actions but only one integrated whole - a view that will be crucial in evaluating the morality of IVF/ET in the next chapter.

The means and ends argument could be pursued from another perspective. It is here assumed that if the necessary end of a desired good is to be achieved, the necessary rules or laws which holds these series of things in place must be respected. For nothing exists without following a rule of its own nature either in its actual existence or in process to it. Similarly the IVF/ET processes have their own laws which must be obeyed rationally if a child is desired as an end in itself rather than as a means. For human reason cannot judge the various important components of IVF/ET as means wrongly and still expect to achieve a proper end - the biological and rational laws must be in proper order to achieve a desired child through the means of IVF/ET. This is to say that the medical engineering that brings about the fetus must grasp the concept of the entire enterprise in actuality and in process or in theory and practice. The laws must be known if they must be respected to do their dutiful work for Kantians or for the naturalists, in the so-called natural way.

However, this is not to say that the medical scientists are the creators of the laws in question from nowhere. Rather, it is to say that the concept which they are grasping or knowing, and respecting are the same laws of nature which, Aristotle, Aquinas, and Kant talked about, and which are in the various natures of things, including human beings.

The means and end connection provokes thoughts of every day experience. Some times people bite their own tongues, while chewing food that will nourish them. Some times too, people have in the process of eating food, swallowed bones which landed them on surgical tables for medical intervention. Experiences have shown that such untoward events do happen and that they are part of the risks we take in daily living of eating food. We cannot stop eating food because of the possible hazard of biting our tongue and cause pain to ourselves or swallowing bone that will result in going to the hospital for surgery. Or, when one is faced with the prospect of undergoing an operation, one does not forego the surgery because of the possible risks of loosing one's life, the ultimate of all the side effects or dangers of any serious surgery. The real ethical issue is whether the reason for eating is right, which in Kantian terms means according to the Categorical Imperative.

Instead of judging the matter by the means, on one hand, we have learned what to do when we must eat some foods

that contain bones, so that we don't end up in the hospital for surgery. We become more intentionally careful. Still, even when all care precaution is taken, some mishaps happen. On the other hand, medical scientists are constantly perfecting their knowledge of medical surgery to minimize risks and prevent lose of lives. In spite of their efforsts some mishaps still occur. So the physical harms which the children born of the new technological means of reproduction may suffer could simply be sufficient reason for the medical scientist to be more intentionally careful in their skills. But they will not, in and of themselves, be sufficient reason to stop helping the needy infertile couples. The reason for that helping must be judged directly.

In certain cultures, as in the Nigerian, in most cases, the sole reason for any marriage is the reproduction of children. Marriage is about children. Marriage does not attain its full value and recognition, either in the eyes of the couple or in those of their community, if no child has been born from it. In many instances, one child is considered insufficient. In such examples, other means such as polygamy are sought to increase the number of children in the family. This is because the value of children in the Nigerian society, is immeasurable and irreplaceable by other important values in marriage and life. The desire to bear children is a desire to do what one must do in order to be whole and happy in a culture where children are the

foundation stone, pillar and main "wealth" of any marriage and of the whole culture. Other reasons, such as having a companion of one's own to help one in one's daily, many and varied needs, especially in one's old age, are simply a corollary to having children. The joy which attends the birth of a child in this culture has other corollaries as well. One thing gives rise to another. But the end of marriage in this culture is to have children.

This means that a marriage partner is being used as a mere means in a childless marriage, that a childless marriage is, in a real sense, no marriage at all, a contradiction that cannot be willed as a universal law.

The reader is left to judge for himself or herself, whether the end of marriage in the reader's culture is to have children. The reader is also left to determine whether having children is obligatory once one decides to marry. If it is not obligatory, then one may conclude that having children in the reader's culture depends on one's choice, or desire. In other words, it is relative to the individual's disposition or choice.

But in the Nigerian society, it is expected that all men and women ought to marry and they ought to bear children in the usual manner when they marry, all things being equal. In the absence of all things being equal, then the individual and community have to do what they can do, as a duty, to meet what is deemed an obligation for all, namely

to marry and reproduce children. Therefore it is a thesis of this dissertation that IVF/ET as one of the results of human effort that can help the helpless is a genuine duty. But the Nigerian cultural view of marriage as a mere means to an end instead of being an end in itself makes the Kantian view of morality or the Categorical Imperative vulnerable.

Most of those in favor of IVF/ET have supported the morality of these reproductive interventions on the bases of their positive consequences rather than using the Kantian line of argument just summarized. An examination of the main tenets of the ethical theory of Utility, variously called Utilitarianism or Consequentialism is therefore in order.

Utilitarianism

Jeremy Bentham (1789) and John Stuart Mill (1863) are the two best known proposers of utilitarianism in moral theory. As in Kant's case, the attempt for the moment is to expose the key points in the ethical theories of these authors. Later, in the next chapter, more of the relevance of their application to the ethical debate concerning IVF and artificial insemination will be seen.

Jeremy Bentham

Frank N. Magill has advanced the following as the "principal ideas" in the ethical philosophy of Bentham:

The first principle of moral philosophy is the principle of utility which states that every man is morally obligated to promote the greatest happiness of the greatest number of persons.

The principle of utility takes account of the fact that all men are governed by an interest in securing pleasure and avoiding pain.

Only the consequences of acts are good or bad; intentions are good or evil only insofar as they lead to pleasure or pain.

Since suffering is always bad, all punishment is bad; but punishment must sometimes be administered in order to avoid the greater suffering that an offender against society might bring to others (1990:344).

John Stuart Mill

Frank N. Magill, presents the following abstract of the central concepts of John Stuart Mill's utilitarian theory of moral action:

Those acts are right and good which produce the greatest happiness for the greatest number of persons. An act derives its moral worth not from its form but from its utility.

Although it is the intrinsic worth of pleasure which gives value to acts conducive to pleasure, some pleasures are better than others in quality.

The proof of the value of pleasure is that it is desired, and the proof of the claim that some pleasures are better than others is that experienced, rational men prefer some pleasures to others.

Justice is the appropriate name for certain social utilities by which the general good is realized (1990:401).

It needs to be clarified that the idea of maximizing good is the central idea in the utilitarian concept. The expression, "greatest number of persons" can be misleading;

Bentham's and Mill's moral theory does not reduce to a "head-count." The main tenet of utilitarianism, according to these authors, is the maximization of values or what is valuable and the minimization of the painful or harmful for everyone as much as possible.¹ As in the deontological ethical theory, there are different types of utilitarianism, even though "utility" remains the basic motivating force to human actions. For the purposes of this work the author highlights two of those which Frankena identifies. "Act utilitarianism" and "Rule Utilitarianism."

Act utilitarianism

According to Frankena, "act utilitarian" hold that one can tell what is right in any given situation by direct appeal to the principle of utility and find out which of the actions open to him or her is likely to produce the greatest amount of good and least amount of evil. The emphasis is on the general effect which the doing of a particular action by an individual will have in a particular situation, rather than the effect which everyone's doing of an action will have in any situation (Frankena 1973).

. On the basis of the main tenets of consequentialism/utilitarianism, that is the maximization of values or what is beneficial and the minimization of disvalues or what is harmful to the individual or society, proportionalism will be treated as the same with this theory in the next and subsequent chapter.

Rule utilitarianism

Unlike act-utilitarianism, rule-utilitarianism emphasizes the greatest benefit which the utility of rules will have in any given moral action, rather than the greatest benefit of an action in a particular situation. In other words, which of the rules open to one or a group of people will yield the greatest amount of advantages rather than disadvantages for the people affected (Frankena, 1973:39)? In its emphasis on rules for morality, it is similar to rule-deontology; but here the rules are selected because of their utility. As indicated the last footnote there is a deep connection between Aquinas theory of natural law (proportionality) and consequentialism or utilitarianism. The connection will become obvious in the application of Aquina's teaching on how to evaluate the morality of any human action to IVF/ET in the chapters that follow. Therefore the immediate issues raised by the utilitarian/consequentialist ethical theory as applied to IVF/ET are fully discussed in these chapters.

Conclusion

The survey of the foregoing ethical principles of human action brings a single undeniable fact to a glaring light. That fact is the enormous difference among them. The various strands of deontological and utilitarian principles are an obvious validation of the scientific and philosophical claim

that "no theory ever agrees with all the facts in its domain" (Paul Feyerabend, 1975:55).

A common factor among them is the recognition that there is "right" and "wrong", "good" and "bad"; but as to what these are in themselves or in relation to matters of human action, is a case of deep division of opinions. All the ethical theories under inquiry have had their share of criticisms, but it is not the intention of this essay to go into those criticisms. The consequentialist/proportionalist theory applied in this work is not intended to claim to capture all the important moral points raised by IVF/ET. Instead, in view of the complexity of issues raised by this technology and the array of people it involves, consequentialism/proportionalism is the most appropriate moral theory suited for the moral evaluation of IVF/ET. This claim will become clearer as this essay progresses.

CHAPTER THREE

THE MORALITY OF IVF/ET: A CRITICAL EXAMINATION OF CDF

One of the most systematic and best known works on the issue of IVF/ET has already been mentioned. It is:

Instruction On Respect For Human Life In Its Origin And On The Dignity of Procreation: Replies To Certain Questions Of The Day (Congregation For The Doctrine Of the Faith 1987, henceforth CDF).¹ For reasons which this essay will show shortly, CDF argues that the only morally acceptable avenue to married couples to reproduce their own kind, even in the extraordinary circumstance of infertility, is through the "conjugal act" (CDF 1987:27). This position, as will be explained, is based on a kind of natural law (deontological) moral argument which views IVF/ET and artificial insemination as unnatural, hence immoral. This chapter will show that the arguments of CDF are mistaken in their application of the natural law ethical theory to the morality of IVF/ET. It will also show that IVF/ET is demonstrably consistent with the natural law

All references to this work will be from the official English translation of the Latin Original. Another source of this document is: *Origins* 16: no. 40, Mar. 19, 1987, pp. 698-711.

(proportionalist) ethics as expounded by Aquinas with regard to the morality of human action. To this end, it will be necessary to ask and re-examine: what does it mean for an act to be natural? The argument here will show that the contention that IVF/ET is unnatural, in the sense intended by CDF in its natural law ethical argument against IVF/ET, is false, and that instead IVF/ET is natural because the actions of human reason that are operative both in these processes and in judging the appropriateness of IVF/ET are natural. For reason is precisely the condition of moral acts and the moral human person.

From this it will follow that acts proceeding from properly judging human reason, like IVF/ET in the proper circumstances, are therefore natural in the relevant sense, and so morally justified.

Two lines of reasoning will be offered in support of this view: (1) To be unnatural in the sense in which IVF/ET is viewed by CDF, does not necessarily mean an act (in itself or by nature) is immoral; (2) The values, achievable by IVF/ET outweigh on balance any disvalues of IVF/ET in sufficient measure that having IVF/ET available and acceptable for married couples yields more total good than the comparative advantages and disadvantages of not having IVF/ET.

This second line of reasoning is built on the basis of the first line of reasoning. For if one concedes to the view that an act can be judged by itself or is immoral by nature, then any argument based on benefits and burdens, or proportionality, becomes meaningless. This complicated wording is necessary to show that having and not having IVF/ET are the courses of action being compared, and that, for each of them, the relevant values/disvalues (advantages/disadvantages) need to be compared. That is, both positives and negatives have to be weighed for each alternative before these alternatives (having and not having) are compared with one another.

To carry out these tasks, this chapter will first summarize Janssens' concept of "ontic evil".² Secondly, it will summarize Aquinas' view of the structure of Moral law, examined in detail in chapter two.

Thirdly, there will be a detailed analysis of Janssens' interpretation of Aquinas' teaching on the structure and morality of any human act, since CDF, bases its natural law arguments against IVF/ET, on "fundamental principles, of an anthropological and moral character" which, according to it, "are necessary for a proper evaluation of the problems" (1987:3) and which are purportedly derived from Aquinas'

² Explaining Janssens' concept of ontic evil first is necessary because this notion is already prominent in Janssens' understanding and interpretation of Aquinas' teaching on *debita proportio* (due proportion).

teaching. This detailed exposition is necessary because CDF fails to see what Janssens correctly sees in Aquinas' teaching on the subject just mentioned; namely, that an act cannot be judged by itself without reference to the human subject who wills the act in relation to a desired end.

My own natural law reasoning based on this analysis will support the claim that IVF/ET is natural in the relevant sense and, more importantly, therefore not immoral in view of Aquinas' conception of the structure and morality of human action. Also my reasoning will draw from Janssens' notion of ontic evil which is sometimes inevitable in many human actions.

Fourth, there will be an outline or summary of CDF's document³ on IVF/ET. Fifth will be a critique of the weaknesses of this document's reasoning on IVF/ET while at the same time offering an alternative (proportionalist or consequentialist) view of natural law ethics which supports IVF/ET in general, and in particular, in Nigeria, as against CDF's deontological interpretation of it.

As already indicated, in these arguments about the morality of IVF/ET, the chapter will for the most part rely on the work of Louis Janssens⁴ who is one of the most

Instruction On Respect For Human Life In Its Origin And On The Dignity Of Procreation: Replies To Certain Question Of The Day, by Congregation For The Doctrine Of The Faith, Vatican City, 1987.

Louis Janssens' work "*Ontic Evil and Moral Evil*", in, *Readings in Moral Theology, No. 1,; Moral Norms and Catholic Tradition*, ed. by Charles Curran and Rihard McCormick, S.J. 1979, will be our main

respected authorities in Thomistic moral thinking. Janssens' idea of ontic evil, in conjunction with Aquinas's concept of *debita proportio* (adequate, due, or commensurate proportion), will be crucial in addressing the issue of conflict of moral values encountered in this chapter.

Concept of ontic evil

According to Janssens, modern day moralists employ the concept "Ontic evil"⁵ instead of "physical evil" because "the contemporary meaning of 'physical' corresponds more to the meaning of 'material'" (1979:60). What then is ontic evil? "Ontic evil" is "any lack of perfection at which we aim, any lack of fulfillment which frustrates our natural urges and makes us suffer" (Janssens 1979:60). Janssens, sees this kind of evil as being "essentially the natural consequence of our limitation" (1979:60), because we humans are, obviously, very limited beings in many ways.

However, Janssens warns that:

our limitation itself is not an evil - to be created to be limited - but, because we are thinking, willing, feeling and acting beings, we can be painfully hampered

guide.

. Some moral thinkers, use the term "pre-moral evil" interchangeably with "ontic evil". See Richard Westley, *Guidelines For Contemporary Catholics: Life, Death and Science*, The Thomas More Press, Chicago, Illinois, p.62, 1989.

by the limits of our possibilities in a plurality of realities that are both aids and handicaps" (1979:60).

Janssens expresses these limits of human possibilities in the midst of realities that are both aids and handicaps in one word: "ambiguity" (1979:60). Our ambiguity is operative in all human actions in which "the concrete act [is] made up of the material and the formal element (means and end)" (1979:60).

Janssens cautions readers not to confuse moral evil with ontic evil because, "ontic evil and moral evil are not the same" (Janssens 1979:67). There is, however, "a connection between ontic evil and moral evil" (Janssens 1979:67). As already noted, ontic evil hampers the development of the human person or group of persons and therefore is harmful to human beings. Sometimes human actions involve moral evil which are harmful to the human individual. This means that moral evil can constitute ontic evil in that it impedes the development of the individual human being of group of community of persons (see Janssens 1987:67). More specifically, the relationship between ontic evil and moral evil is seen in the moral interactions between human persons. In Janssens words,

· since morality is chiefly concerned with the human relationships and the well-being of human beings, it cannot remain unconcerned about the ontic evil which in all its forms handicaps and harms the development of individuals and communities (1979:67).

Summary of the structure of moral law as taught by Aquinas

This topic was discussed in chapter two, so only the gist of that chapter needs to be recapitulated here. Aquinas viewed morality, or "natural law," as having a single precept in one way, but multiple precepts in another sense. For Aquinas, law must have a single precept because man, though he is a unity, is complex because he has many parts. This is to say that the single precept of law in the unity of a person is represented in the many parts of the human nature, including man's sensuous parts. But natural law has only one precept because law is derived from reason which is only one (Aquinas S.T. Ia IIae., Q. 94, art. 2; emphasis mine). The complexity of a person in his/her composite reality or material nature includes that persons have desires (irrational appetites) that come under the proper guardianship of reason. This proper rule of reason over the bodily nature is necessary to avoid conflict in the unity of the human person in his/her several material, social, emotional, spiritual and other needs. One can say, because there are multiple precepts (laws), then there are multiple means to achieve an end; but reason is the sole judge of which means to use (though it sometimes judges rightly and sometimes wrongly).

(B) But Aquinas also offered reasons for saying that natural law has many precepts. He did this by drawing an analogy between the principles of natural law and the first or self-evident principles of demonstration. Aquinas held that the principles of natural law are to practical reason, what the axioms of science are to theoretical reason. In each realm of reason's search for understanding, there are self-evident first principles (Aquinas Ia IIae, q.94, art. 2). For Aquinas, the first self-evident principle in inquiring about how to act (practical thinking as opposed to theoretical thinking) is "do good and avoid evil" (Aquinas Ia IIae, q.94, art. 2).

He then drew a parallel between "being" in relation to "theoretical reason" and "good" in relation to "practical reason". As he saw it, just as "being" is the first thing the human mind can grasp when it beholds a thing, (first principle of theoretical reason), so too "good" is the first thing which "practical reason" inclines to in its activity. When "reason" is focused on action and doing something, it is called "practical" reason. Practical reason, that is, reason seen as the reason of an agent, acts like every agent towards an "end"; and the general meaning of any end for reason is precisely in terms of "good." Thus Aquinas concluded that the first principle or origin of the activity of practical reason is that which all things seek after,

which is the general meaning of "good" (Aquinas Ia IIae, q. 94, art. 2).

With this understanding, Aquinas identified what he called the first command of all law, namely 'that good is to be sought and done, evil to be avoided'; all commands of natural laws are based on this" (Aquinas Ia IIae, q. 94, art. 2). This then at the most general level is what is called moral law. Next, in order to clarify what he means by "natural law", Aquinas adds, "Accordingly, then natural law command extends to all doing or avoiding of things recognized by the practical reason itself as human good" (Aquinas Ia IIae, q. 94, art. 2); and "to the avoidance and shunning of the apprehension of their contraries as bad" (Aquinas q. 94, art. 2). This is to say that, with regard to rational human actions, Aquinas used the phrase "natural law" and "moral law" equivalently. For Aquinas reason is the natural law - the guiding principle, without which no human action receives any specification. It is this natural law theory that CDF intends to apply in its *Instruction*. But this chapter will argue that CDF misapplies this theory in concluding that the human reproductive technology of IVF/ET is unnatural and therefore is inherently immoral.

Before that argument begins, an issue relevant to that argument needs to be examined in order to show how an acting person is necessarily related to his activity.

The structure of human action

A proper analysis of the morality of IVF/ET, especially in relation to CDF's arguments, also depends on understanding Aquinas' exposition of the structure of human action and of his systematic division of the characteristics of the human person. According to Louis Janssens, "Thomas Aquinas, approaches the topic of the structure of the human action in the light of his views of the acting subject, the inner act of the will" (1979)41). In other words, a theory about the evaluation of any strictly human action should not precede a correct understanding of the moral character of the human subject. One of the arguments of this chapter, as will be shown when Aquinas' teaching on the morality of any given human action will be explained, is that the proper end of an action is determined solely by its relation to human nature.

As Janssens, explains: Aquinas calls the will, "an essential condition of any explanation of strictly human actions because the will, as rational appetite, is specifically characteristic of the human being and consequently, only the acts which emanate from the will are properly speaking human acts" (1979:41), as contrasted with mere activities of humans. Following this, Aquinas first considers "the act of the will" before he turns "his attention to the external actions which are also acts of the will itself ... although they depend on other faculties for

their realization" (Janssens 1979:41). In doing so, Aquinas says: "Now it is clear that whatever actions proceed from a power, are caused by that power in accordance with nature of its object. But the object of the will is the end and the good. Therefore all human actions must be for an end" (Aquinas Ia IIae, q. 1, art. 1; emphasis mine).

Therefore, in talking about the morality of IVF/ET, one is talking, first and foremost, about the structure and characteristics of human beings on which the morality of IVF/ET depends. As Aquinas says:

"Now man is master of his actions through his reason and his will; whence, too, the free-will is defined as *the faculty and will of reason*. Therefore those actions are properly called human which proceed from a deliberate will. And if any other actions are found in man, they can be called actions of a *man*, but not properly *human* actions, since they are not proper to man as man" (Aquinas Ia IIae, q. 1 art. 1; emphasis mine).

So IVF/ET does not derive its meaning or moral significance just from itself as a set of material events and in isolation. Instead it takes its meaning and moral significance from the human beings and their ends who willfully carry out the act for specific purposes for themselves.

The reader should note that one aim of this exposition is to show that the human "agent, consequently, is so

essentially related to the structure of the activity that his activity can only be called human to the extent that it originates within a thinking and willing subject who is therefore capable of a free act of the will" (1979:41; emphasis mine).

As has been noted, although there is only one precept of the natural law in the unity of a human person, that law is represented in different ways in the different parts of the human person, because of the complexity of the structure of the human person. So, the human will must have its own precept, inherent to itself, that moves it into willing something. This precept is only powerful and useful to the extent it only moves the will, pure and simple. This precept is human reason as judge of ends. Therefore just as it is true to say that a rational being cannot do anything without the will; so it is true to assert that he/she cannot do anything independent of reason. This is not, however, to argue that every action in which reason involves itself, is morally good, properly considered.

But human reason as a judge of ends, is not all that "nature" or "natural law" amounts to. Thus, the reader is again reminded that in chapter two, Paul Edwards and Vacek Edward, respectively referred to "nature" as "the laws and principles of structure by which the behavior of things may be explained"; or "the intrinsic principles of human growth including our biological, psychological, intellectual and

religious dimensions." As noted earlier, this implies that since there are many laws, there are also many means to an end. But reason decides which means to adopt in relation to the human person's end. The fact that there are several possible means of pursuing a particular end in view means that, this end in view is not the only important element in the consideration of the acting subject. That is, the means is also important, not only the end in view in the person's consideration. In other words neither means nor end can be omitted in any moral reflection; both must be considered.

For example, in order for a couple to bear a genetic child, their sexual organs and hormonal or chemical substances must be in good condition, and they must be able to perform the sexual act for the desired child to come into existence. Without these material and organic elements and the performance of the sexual act itself, the desired child can never come into being. This means that although the couple's ultimate end of having a genetic child is valuable in itself, the couple cannot rule out the fact that having the normal means, the normal sexual organs and hormonal or chemical bodily substances, is also very important. Bearing a genetic child necessarily implies having the required means, normally the biological materials and the ability to perform the sexual act itself. Moreover, if any of the required material organs or chemical substances are in irremediable dysfunctional condition, proper attention must

be paid to the question of means in order for the ultimate goal of a genetic child to be attained. Necessarily, the material elements (means) to bearing one's own genetic child must be well cared for.

Similarly the material elements and activities involved in IVF/ET, as alternate means designed to reproduce a child, must be well considered to be in the appropriate condition, in order for a child to be properly, morally conceived. This material means of IVF/ET may be of special value and necessary for an infertile couple to conceive; but it cannot be treated just anyhow by those involved for the sake of their ultimate end. The material elements in both the traditional means of human reproduction and in IVF/ET are, in each instance, indispensable elements in human reproduction. But they must still be carefully judged for their use to be morally appropriate.

Reason must examine these means in the light of the will's orientation to the (human) good. For the good in general and even the good in more specific goods like human reproduction is not available without the material elements (means) used to attain them. Without material means in any human action, the will would be merely analogous to theoretical reason, bereft, as it were, of its other side, practical reason in that it produces no action. Material elements are needed if the will is to attain its end. For although the "will" may, will what theoretical reason

beholds as its goal, the will can do nothing except willing that something actual happens. So it is practical reason which, as it were, translates the will into reality, by engaging other human faculties' necessary organs into action. It does this by devising a proper means towards the attainment of what is willed by the faculty of the will or what is beheld and named by theoretical reason - the "good".

Now the specific good of reproduction requires in the ordinary case material acts including sexual intercourse, gestation, bearing a child, caring for it and educating it in order for that end of reproduction to be achieved. But for some couples who cannot reproduce by ordinary sexual intercourse, another set of material acts, including acts of organs, and other bodily products or parts, namely, IVF/ET, is available. The fact that some means may be more commonly used than others is not morally significant, and in any case, both need moral examination as means to the good end.

Therefore, the fact that IVF/ET in the circumstances of infertility of couple is the sole possible means for child-bearing does not imply that IVF/ET is automatically a good means, even if we assume for now that child-bearing as an end-in-view is a good, a point that will later be demonstrated carefully.

Making this point clearly is necessary because sometimes the only possible means to a good end is itself morally unacceptable.

It has in fact been argued by CDF that, even though IVF/ET is the sole means of achieving human conception in some situations, this means is not well ordered in its practical reality and so the use of IVF/ET is immoral. Sometimes people intentionally set out to achieve ends they know to be morally wrong, as when someone voluntarily and willfully, kills another human being simply to end his/her life. In those cases, the end in view is immoral. But at other times a person does moral wrong while having a good end by choosing a means to that end which is morally unacceptable; and sometimes this occurs when the means chosen was the only possible means to the end. In such cases, the moral person must forego the worthy end in order to avoid the morally unacceptable means.

Part of the present inquiry is to determine if IVF/ET is a morally acceptable means to reproduction, given that CDF has argued that it is morally unacceptable. Of course, people sometimes unintentionally engage in immoral actions. For it is sometimes difficult to separate a good means from a bad one and a person may mistakenly use an unacceptable means to a worthy end. Louis Janssens clarifies this point by saying that even when morally bad means are chosen, humans are so structured that they are chosen for the sake of human good as long as the action being performed by the subject is from the will to achieve the good end. He says:

"this principle can be applied to each human act, even a sinful act, since in any sinful act, man still intends to reach for something which is apprehended as something good, at least for some particular tendencies, although it is not in accord with the true good of the whole person *contra naturam rationalem secundum rei veritatem* (1979:42)

Aquinas describes what is going on in such a situation in these words:

That to which the will tends by sinning, although in reality it is evil and contrary to the rational nature, nevertheless is apprehended as something good and suitable to nature, in so far as it is suitable to man by reason of some pleasurable sensation or some vicious habit (Ia IIae, q. 6, art. 4)

That is, it is falsely apprehended as a morally acceptable means to something that is a genuine part of possible human good. But the complication which arises from the fact that both moral and immoral action originate from the same principle of the human will, does not by that very fact destroy the basic fact that the end in view of the acting subject, determines the culpability or commendability of the actor, because the human subject in his/her action seeks "to realize that which is good - the proper object of the will - means that we aim at this good as the end of our action" (Janssens 1979:42).

Viewed in this light, Janssens, says that, "the end is the primordial element of the structure of an action,

because it is the proper object of the act of the will"; and that "the subject or the inner act of the will is involved in the definition of the end" (1979:42; emphasis mine). In Aquinas's words, "every end of an action, therefore, is to be taken as an end of the subject, of the inner act of the will" (Aquinas Ia IIae, q. 18. art. 6). However, this does not demonstrate that the end in view is simply the determiner of the morality of an act; it only indicates that the end in view is structurally essential, and therefore an essential component of the moral judgment.

It would seem that the problematic or intertwined nature of means and ends question, involved in human action, is unavoidable. In Janssens' opinion, Aquinas wanted to avoid two extreme views - one is a subjectivistic interpretation, the other is an objectivistic (i.e. without reference to the human subject) explication view of human action. Because of the complicated nature of what is involved, a full rendering of Janssens' understanding of the issue at stake seems appropriate:

It is clear now that the end is the primordial element of the structure of an action, because it is the proper object of the act of the will. But it is equally clear that the subject or the inner act of the will is involved in the definition of the end. St. Thomas considers this thought over and again. "**Voluntas proprie est ipsius finis.**" "**Finis proprie est objectum interioris actus voluntatis.**" Every end of an action, therefore, is to be taken as an end of the subject, of the inner act of the will, viz., a **finis operantis** ...

Thomas does not give this principle the

sense of a subjectivistic interpretation of human activity. He will emphasize that a definite good, as object and end of an inner act of the will, cannot be pursued by the subject by any kind of action (Janssens 1979:42-43; emphasis mine).

That is, moral judgment must attend to the means, the material actions needed to achieve an end, as surely as it must attend to the end. But equally, moral judgment must not focus solely on the material actions involved without reference to the end of the subject pursuing them; for these material actions are not considered as properly human actions save in relation to the willed pursuit of an end in which they are grounded.

According Janssens, although Aquinas wanted to avoid a subjectivistic account of human action, focused solely on willed ends, he nevertheless maintained his position as well that no human activity can be morally evaluated without reference to human subject who, is the origin of the activity. With this, Janssens goes on to say that Aquinas,

... will not abandon the position that the subject or the inner act of the will must be considered as the starting point; on the contrary, he will always stress that the end of the inner act of the will (or the *finis operantis*) determines the concrete structure of the action which fits this end (*finis dat speciem actui humano*) (Janssens 1979:43).

. It is at this intellectual juncture that Janssens, points out that a major error on the part of certain authors

or traditions⁶ is the presupposition that an human action can be morally evaluated independent of the acting subject. Building on his understanding of Aquinas, Janssens explains the error of these authors or tradition in these words:

Our textbooks distinguish between **finis operis** and **finis operantis**. The intention of the authors is evident; it is an attempt to secure a moral evaluation of the action itself (in se), as related to the acting subject. Now it is to be noted that Thomas never uses this distinction in his **De Actibus Humanis**, although he knows it. He mentions it in his commentary on Petrus Lombardus. But he accentuates immediately that the *finis operis* is always converted into a *finis operantis*: *finis operis semper reduncitur in finem operantis*. His reason for this teaching is clear: he draws it from the very definition of end. To the mind of Thomas there is no end without the inner act of the will of the subject and vice-versa. The end is in the strictest sense of the word the peculiar object of the inner act of the will. In other words, the good, which is the appropriate object of the will, can only be termed an end insofar as it is aimed at by the subject in and through his action; it is always a *finis operantis* (Janssens 1979:43; emphasis mine).

That is, in any actual human act, whether performed or still only potential and under consideration, there can be no end-of-the-act other than the end-of-the-act-as-considered-by-the-actor. The act in the abstract does not exist in relation to any end. The act, as a class for theoretical analysis, can be said to have some abstract

While Janssens gives J. Mangan as his example, this chapter will focus on a similar error in the document on reproductive technologies of Congregation For The Doctrine Of The Faith.

existence, as a set of observable or mechanical behaviors, for example. But as an act-for-an-end, the act can only be considered as an act-of-an-actor-considering-it-for-an-end. There is no relation of act to end save by and by reference to an actor, no *finis operis* without a *finis operantis*.

From this it is clear that, first, an human act cannot be morally evaluated independent of the human agent. Therefore, secondly, and in view of the first, an act has a moral meaning because of the end of the agent; but this does not mean it has meaning solely because of the end. Thirdly, because an human actor must always employ a means to a desired end, he or she is practically (in terms of practical reason) involved in that means, at least if the agent actually wishes to attain his/her desired end; that is, the means itself is in a sense indispensable (or several means are if several are possible). This is to say that just as the end is desired for its value or for itself, so is the means desired in order to achieve that end. It is in this light that Aquinas could say that the end "is aimed at by the subject in and through his action".

This is also why Aquinas taught that what is true of the means is also true of the end in terms of morally evaluating an human action; but again this does not imply that an act can be morally evaluated solely from the point of view of the end. Janssens explains:

According to Thomas ... "The *finis operis* is that to which the action is directed by the acting subject (*ab agente*); for this reason it is called the cause of the action (*ratio operis*). The *finis operantis* is the goal at which the agent in the end (*principaliter*) aims," (Janssens 1978:42-43; emphasis mine).

That is, the *finis operis* is always a *finis operantis* in Aquinas' view. Now this inseparable⁷ or necessary connection between means and the end of human action warrants Janssens to say that:

This view of Thomas is of far-reaching importance because the determining situation of the subject in the activity makes it possible to consider our actions not as a succession of separate and disjointed actions but as the integrated moments of a life history in which unity and wholeness can be realized by virtue of the ends of the agent (1979:43; emphasis mine).

This analysis of the structure of human act, will still be incomplete without an examination of how the human will, strives towards its end; that is, the good to be achieved. Here again Aquinas guides us. According to Janssens, Aquinas, believed that an agent's will can strive to its end "either in an absolute way when it wills the end in itself

The terms "inseparable" or "necessary", here mean that an end always has a means, not vice-versa. For, there are things which exist as mean to something else, but are not always used for those ends. Or even when they are used, they do not always yield the intended end. But when an end is achieved, then it always has a means.

and by itself (*absolute secundum se*), or when it wills the end as the reason that it wills the means to the end (*in ratione volendi ea quae sunt ad finem*)" (1979:44;)⁸. This means that in the first of the two ways, a good can be striven for, or valued for its own sake abstractly, that is, without being connected with an action; for example, when one wills to have good health without doing anything to gain it (Janssens 1979:44)⁹.

Aquinas' exemplifies the first of the two ways by contrasting it with the second way:

Hence it is evident that the will is moved by one and the same movement, -to the end, as the reason for willing the means; and to the means themselves. But it is another [that is, distinct] act whereby the will is moved to the end absolutely. And sometimes this act precedes the other in time; for example when a man first wills to have health, and afterwards deliberating by what means to be healed, wills to send for the doctor to heal him. The same happens in regard to the intellect: for at first a man understands the principles in themselves; but afterwards understands them in the conclusions, inasmuch as he assents to the conclusions on account of the principles (Ia IIae, q. 8. art. 3).

A correct understanding of the above text will show that there is no way the will can accomplish the end which it wills or desires absolutely in itself and for its own

, Aquinas, S.T. Ia IIae, q. 8, art. 3.

, Aquinas S.T. Ia IIae, q. 8 art. 3; S.T. Ia IIae, q. 12, art. 1.

sake, without devising and willing a particular means to attain that absolute end. This means that, if the end is to be attained, then a particular means must be chosen if already in existence; or a particular means must be devised if not in existence, in order to achieve the end that is willed. Thus, without some particular means, the agent's aim and valuing of that kind of good in general will be frustrated. This is not to overlook the possibility that the aim of the agent may still not be attained even with the consideration of a means toward the end because even a means that is often effective can still fail sometimes and some things initially considered effective means are in fact not effective. For example, it is true that neither conjugal act nor IVF/ET always produces children even when those means are available. Sometimes, neither of these two means of human reproduction is free from the mishaps which make the end unattainable.

According to Janssens Aquinas, distinguished these two elements of a human act: "The **intentio** (intention) is the striving toward the end to the extent that it is within the range of the means.' 'The **electio** (or the choice or selection of the means) is the concentration of the will on the means to the extent that they bear upon the attainment of the end'" (1979:45; emphasis and parenthesis mine). There is in this account an obvious interrelationship between **intentio** and **electio**. Although the **intention** concentrates on

the end, it is at the same time mindful of the means which is in turn the focus of *electio*, and vice-versa. For without means to achieve an end, intention is empty and all that is possible is valuing the end absolutely, as in the first way mentioned above.

The relevance of these concepts in the evaluation of the structure of IVF/ET, can hardly be exaggerated, because they describe the essential structure of an action, such as the action awaiting moral approval or disapproval here. For the human, "will" and "reason" cannot aim at a goal effectively (that is other than abstractly, in general), without aiming at a particular choice (*electio*) of means for achieving that goal. As Janssens points out, the material sense of *intentio* and *electio* "are the same since they contain the idea of the whole act, end and means", although "they are formally quite distinct" (Janssens 1979:45). This is not to imply that there is an unbreachable, necessary connection between the intention and the choice of a particular means, because there can be other and possibly better means which may in the end yield greater and better results; but in all activities of practical reason, *intentio* and *electio* are inextricably bound together. Janssens distinguishes between the formal structure of *intentio* and the *electio*, by specifying clearly their foci and intent:

The **intentio** is directly aimed at the absolute element of the structure of the action, that is, the end itself which is the reason that the means are willed and consequently is the principle of the act ..., the **electio** signifies the relative element of the act, viz., the means (by its own definition means indicates a relation to the end which is only useful until the end has been attained)...(Janssens 1979:45; emphasis mine).

But it needs to be acknowledged that the above still does not tell us how one is to distinguish a morally good act from an immoral one, given that the nature of the human being means that humans are capable of willing both moral and immoral acts. Before this important issue of how to distinguish a morally good action from an immoral one, is examined, however, Aquinas' teaching about the morality of the **voluntas** (the will), because of its essential relation to the issue to be discussed, needs to be explained first.

The morality of the voluntas (the will).

By way of summary, so far, it is clear that according to Janssens' interpretation of Aquinas's position on the morality of human action, "the good which is the proper object of the will is also its end." Accordingly that end is also "a moral good (*vere bonum*) when it corresponds to reason" (1979:47-48). Surprisingly too, even if a particular good "is not within the realm of reason, it is still a good (*apparens bonum*), as far as it is consonant with a particular appetite, in spite of the fact that it is morally vitiated" (Janssens 1979:48).

In order to unravel this apparent contradiction, Aquinas introduces his readers yet into another concept, before giving the conditions by which to know a morally good from morally vitiated will, from which in turn we can distinguish a morally good action from a bad one. This new concept, is inner disposition in connection with the virtues. For in order to understand Aquinas's teaching on *Voluntas* (the will), we need to study his teaching on virtue, which he claims is condition *si ne qua non* for an human agent to perform a morally good action. As Janssens affirms: "Whether or not the subject is taking the moral good as the end of his action depends on his inner disposition" (1978:48; emphasis mine). The virtues he says

are acquired dispositions (habits) which direct us toward the moral good as the end, even when we do not act. ... A virtuous person is directed toward the moral good because he loves and wills it as an end by virtue of an inner disposition (Janssens 1978:48).

Janssens supplies us with an example of what is meant by virtue as disposition in our actions. He says, for example, when a person acquires the virtue of Justice, a person would by this disposition be in a suitable or proper state to love and will the social relation and conditions that fit the dignity of man, even in circumstances when the person finds

it impossible to overcome certain obstacles in his/her own actions (cf. Janssens 1978:48).¹⁰

It is in this regard that virtue becomes the primary subject of interest for Aquinas as regards the morality of the will. For if a person is always disposed to act justly, or to love, the person will never in any circumstance will otherwise because by habit (that is, through a series of intentional and practical repetitive efforts) it has become his/her nature (his/her character/personal human condition) to act justly or to love. The overall result is (along with other virtues) that the person becomes a good person who always wills to act morally even though, under certain circumstances, he/she is unable to do good even when he/she wills it. Janssens words the idea in this way:

... virtue makes the subject who possesses it a good subject. It is the source of the morally good *simplex actus voluntatis* which enables us to set our will on the moral good in an absolute sense and for its own sake. So the first moral qualification [of a good person] does not concern the particular acts but the subject himself who by virtue of his virtuous dispositions is turned towards the moral good as his end (1978:48).

See Thomas Aquinas Ia IIae, q. 20, art 3; or as Aristotle says: ... "the work of man is achieved only in accordance with practical wisdom as well as with moral virtue; for virtue makes us aim at the right mark, and practical wisdom makes us take the right means." Nicomachean Ethics 1144a 7-10

Or as Aristotle, from whom Aquinas derived his idea of virtue in connection with a morally good will, words it:

Therefore, as in the part of us which forms opinions there are two types, cleverness and practical wisdom, so too in the moral part there are two types, natural virtue and virtue in the strict sense, and of these the latter involves practical wisdom (Aristotle, Nicomachean Ethics 1144b 13-17).

This concept of virtue will be returned to later, where it plays a complementary role in aiding the human subject to make a prudent judgment because a prudent person is always inclined to right reason.

Exterior act (actus exterior)

As has already been indicated, the will does not operate in a vacuum nor does it operate alone in any activity. That is, an action that is to be done in pursuance of a goal must be performed both with something intangible as the activity of mind or (practical) reason and with something tangible or sensible in a physical sense as the means to the goal. Or as Janssens puts it,

"Our will must rely on the medium of other faculties and our bodiliness as agencies which enable it to effect a real contact with reality. For this reason our action is not only an inner act of the will (interior actus voluntatis) but also an exterior event (actus exterior) (Janssens 1979:46).

The morality of the human action

By way of recapitulation Janssens says that, it was Aquinas's conviction that "the inner act of the will (end) and the exterior act (means) are one and the same concrete act" (1979:49); or in Aquinas own words: "internal and external actions are different in the physical order: yet ... they combine to form one thing in the moral order" (Ia IIae, q.19, art. 3). This led Aquinas to come to the conclusion that both means and end "must also be treated as one from moral view point" (Janssens 1979:49), that is, the whole package. Nevertheless, "Thomas chooses as his starting point the acting subject, the end which is the proper object of the inner act of the will and which impresses the qualities of good or evil on the action: *finis enim dat speciem in moralibus*" (Janssens 1979:50). But this quotation must not be misunderstood: it does not reduce morality to a question about the end in view; the means must also be subjected to careful reflection.

In this regard, Janssens points out something in the above statement of Aquinas' moral teaching that has created confusion for some moralists in interpreting Aquinas' natural law moral theory. On the one hand Aquinas "says that the *species moris* - the goodness or the malice of the act - is determined by the end, the object of the inner act of the will" (Janssens 1979:50). But on the other hand Aquinas "writes that the *species moris* of the exterior act depends

on the fact whether or not its object is in keeping with reason (*secundum rationem* or *praeter rationem*)" (Janssens 1979:50). Or Aquinas says: "good, inasmuch as it is in accord with reason, and evil, inasmuch as it is against reason, diversify the moral species" (Ia IIae q. 18, art. 5).

Some Thomists have therefore, held that, making these two seemingly contradictory statements, Aquinas was actually indicating that "the morality of the exterior action can be evaluated by itself and as an element which is disconnected from the subject or the end of the inner act of the will" (Janssens 1979:50). But Janssens quotes Aquinas to show that, "primacy of the end, the formal element ... must be the starting point of the search for the insight into the morality of the action" (Janssens 1979:50). Thus he quotes Aquinas:

"Nevertheless, the inner act of the will is the formal element of the exterior action, because the will itself acts through the medium of the body and because the exterior actions concern morality only insofar as they emanate from the will ... From this follows that the species moris is formally dependent on the end (of the inner act of the will) and materially dependent on the object of the exterior action" (Janssens 1979:50).¹¹

Janssens cites Ia IIae, q. 18, art. 6 ad 2, for this quotation that he makes of Aquinas.

There are two ways in which this act can be morally defective: (1) the end may be disordered. That is for Aquinas, the end of the inner act of the will may not necessarily be always good; for "the end itself may be good or bad" (1979: 50). Or (2), the means may be defective. As Aquinas says, "Although external things are good in themselves, nevertheless they have not always a due proportion to this or that action. And so, inasmuch as they are considered as objects of such actions, they have not the quality of goodness" (Ia IIae, q. 18, art. 2). On one hand therefore, when "the end is bad, the whole action is fruit of a **mala voluntas** and because the action is only human as far as it emanates from the will (*voluntarius*) it is entirely bad" (Janssens 1978:50). But, if on the other hand the end of the agent is good, then:

"the entire action is necessarily good if it is not a mere velleitas but rather the very will to bring about an end, or in other words, if it concerns a real *intentio finis* which involves the effective will to realize an end for its own sake and also as reason and cause of the action (*ratio et causa volendi*) (Janssens 1978:51).

This last clause assumes that the material means towards the end in view is also good. But the morality of an act remains problematic when the end in view is good but the means is bad or involves some evil consequences. Here, one needs to

consider the fact that for Aquinas, evil is not an absolute in itself. For as Aquinas says:

Evil implies privation, not absolute, but affecting some potentiality. For an action is said to be evil in its species, not because it has no object at all; but because it has an object in disaccord with reason, for instance, to appropriate another's property (Aquinas Ia IIae, q. 18, art. 5).

This means that evil is always in relation to something, not an absolute in itself; it is a privation of or deprivation of some value. It is something that affects another thing that is good in itself.

Now, how does one know that the exterior act (the means) that involves evil is or is not in keeping with the good/end of an action, or reason which is the measure of good/ends, that is; of morality? Aquinas answers this question as follows:

although the goodness of an action is not caused by the goodness of its effect, yet an action is said to be good from the fact that it can produce a good effect. Consequently the very proportion of an action to its effect is the measure of its goodness (Aquinas Ia IIae, q. 18, art. 2).

The guiding principle here is to keep in mind that, for Aquinas, an action is immoral if it is disproportionate or incommensurate to reason on one hand, that is, to the ends

reason affirms and chooses. It is moral if it is adequately proportionate or commensurate to good ends, that is reason.

Put in another way "The means of the exterior acts participate in this moral goodness when they not only serve the purpose of effecting the end but moreover, when they are in the correct proportion to the end according to reason" (Janssens 1978:54). According to Janssens, this principle for moral action has some rational cognitive implication in Aquinas's thinking. Thus Aquinas writes:

... it is essential to the voluntary act that its principle be within the agent, together with some knowledge of the end. Now knowledge of the end is twofold; perfect and imperfect. Perfect knowledge of the end consists in not only apprehending the thing which is the end, but also in knowing it under the aspect of end, and the relationship of the means to that end. And such knowledge belongs to none but the rational nature (Ia IIae, q. 6, art. 2).

It should be clear from all of the above that according to the dictates of human reason, an action is morally good, "when it is directed toward the end in keeping with the order determined by the reason and eternal law" (Janssens 1979:54); but the act is immoral when it deviates from the rule of reason whether with reference to the specific end in view or in relation to the overall good (see Janssens 1979:54).

But there is still a question of how to determine whether the means involved in an action are proportionate or disproportionate to the end in view, that is, how we can

objectively determine a good or bad means, without falling into the error of ethical subjectivism or relativism.

Aquinas was well aware of, and so avoided the seeming subjectivism involved in his reasonings as Janssens pointed out. Thus Janssens would say that since end and means as constituent parts of an action both "must in Aquinas's thought be judged morally in the light of the objective measure of morality" (1979:55); then just as the subject's "intention must aim at an end which is morally good according to reason" (Janssens 1978:55) so also must the subject's exterior action "be *materia debita proportio*). In addition, the material object or means must be in due proportion to that end ... if there is to be no contradiction between end and means" (Janssens 1979:55; emphasis mine). The last clause adds a further test beyond proportionality of the morality of an act.

Janssens translates this doctrine about the morality of an action into four descriptive conditions for an act to be moral. (i) The ontic evil should not be intended or willed *per se*. (ii) There should be no intrinsic contradiction between means and end or the whole action. This is not to imply that Aquinas is deontological when the term "intrinsic" contradiction between means and end is employed here; because for Aquinas there is no such thing as good or evil in itself without reference to a human will and

intention/end.¹² (iii) Human subjects have the moral obligation to reduce as much as possible the ontic evil which comes about when we act". (iv) Humans must also consider the place of the end of the action in the totality of human life. The fulfillment of these conditions requires the presence of the virtues, especially prudence. The virtues, especially prudence enables the acting person to judge the whole action according to good reason.

Janssens expands our understanding of these four conditions. The first condition: (i) The requirement of a debita proportio. We need to ask, when may we allow ontic evil in our acts? (1) If ontic evil is *per se* intended, the end itself (the object of the inner act of the will) is morally bad and since this is the formal element in the act and therefore the reason and cause of the exterior action, violation of this condition vitiates the entire action. In doing this a person would allow ontic evil precisely as a deficiency that frustrates human inclination to do good and avoid evil; moreover doing so is harmful to the long term development of the virtuous and so of human individual and common good. Therefore, one should never will ontic evil as the end of our action or human good. As Janssens puts it: "the entire set of moral laws and principles exists for the

. For a comparative view of traditional concept and use of the principle of double effect, to judge the morality of human action, and the proportionalist understanding of this principle, cf. Richard Westley, *Life, Death and Science*, The Thomas More Press, Chicago, Illinois, 1989, pp. 47-71.

real well-being and the true development of man and society" ... [so] it is obvious that we would fall into immorality if we should strive for ontic evil itself and for its own sake, because ontic evil necessarily impedes and precludes the development of man and society" (Janssens 1979:69). In this sense, Aquinas says the individual is never justified, not even in the case of self defense, in willing the death of a human subject as an end, for example, because this would make his act *per se* an act of murder" (Janssens 1979:69). However, there can be situations in which intending a (partial) ontic evil as the end of our actions is justifiable, namely, when it is for the sake of a greater common good which supersedes the individual good.

The second condition (ii): There should be no intrinsic contradiction between means and ends. This condition demands that "When the single and composite act is viewed from the point of view of reason (*secundum rationem*), it must be found without an intrinsic contradiction between the means (exterior act as material element) and the morally good end of the inner act of the will (formal element)" Janssens 1979:71). Or as Janssens differently words the idea: "Put into terms of the philosophy of values, this means that the means must be consistent with the value of the end" 1979:71). As Janssens indicates, the goodness of an end alone is not a justification of a bad means or the action. He writes:

"However essential this condition [good end] may be, it is not yet sufficient, because "the moral end as formal element only deserves to be labelled as the reason and the cause of the exterior action if this action is a means which, in conformity with reason (*secundum rationem*), has a debita proportio to the end, which only in these conditions puts the stamp of its moral goodness on the totality of the act" (Janssens 1979:71).

What is meant by saying that there should be no intrinsic contradiction between the means and the morally good end of the inner act of the will, is that "no intrinsic contradiction between the means and the end may be found in the total act when the act is placed in the light of reason" (Janssens 1979:71).

The problem here is in acknowledging that a means is inconsistent with an end that is good; for as a means to that good, one has at least some evidence that what reason sees as a means is good. But in such a case, Janssens says of the inconsistency that "I cannot but register this evidence cognitively even when it concerns a truth which displeases me or which interferes with my own profit or pleasure" (1979:71).

According to Janssens, when reason finds itself in this situation, it is said to be "disinterested" because it is functioning as free will *facultas liberlis* (see Janssens 1979:71-72). That is, though the means is seen as a means to a good end, the will is not necessarily determined to will

that means. In recognizing the inconsistency with the end, this freedom of the will makes the will submit

"itself necessarily and gratuitously to the truth which it embraces as evidence or as something which has all the appearance of evidence. It affixes to the truth the strictest connotation of necessity, absoluteness and universality so that it rejects any suggestion of a negation of itself (Janssens 1979:72).

The idea of reason not negating itself, is central to judging the consistency of means to the end of the action. For the human subject who is involved in the action, which is a united whole event, a single package involving means and end, is also himself/herself a united whole constituted of rational and corporeal elements - a single unified being who wills and is rational, emotional, temporal, spatial, social, and above all limited, so that one element of his/her being is necessarily affected by his/her action or judgment of means to the action (see Janssens 1979:60-66). Janssens expresses what is involved here forcefully in the following words:

When it is obvious to me that I, the subject of the whole action, use a means which is the negation of the value (or the principle) I am affirming in my idea of the end, I am forced to be aware of this contradiction. This contradiction is the source of my feeling guilty: the awareness of the inner disunity of the subject which has turned its free will against its rational understanding when it aimed at an end it could not

rationality sanction or when it used a means by which it negated the value it affirmed by the end. My self is a united self, a subject which is undivided, and I preserve this unity only when I apply my will to use the means and to realize the end to my reason (1979:72).

In view of this undivided unity in both human action as a whole, and the human subject himself/herself, it is important not to disassociate oneself from the good which the human reason (person) sees if an action is to be to the well-being of the person. Hence Janssens says:

My reason is necessarily ordered to the truth. It is like a pivot on which everything hinges. My power to will is free. Hence, there is only one way to preserve myself as a united subject: I must order all the aspects of the act of my will to the disinterested understanding of my reason. That is the fundamental axiom of morality (1979:72).

But ontic evil is sometimes inevitable in our acts. That inevitable reality is the focus of the third and fourth conditions. That is, sometime we must act even when there is ontic evil because it is unavoidable. As Janssens says:

"We cannot do away with ontic evil in our act without depriving our actions of their effectiveness and without sooner or later endangering the realization of our morally good ends. Within these restrictions, the implication of ontic evil in our actions does not mean that no attention should be given to the *debita proportio* of the mean to the end" (1979:79).

In giving attention to *debita proportio* the human subject is then left to consider correctly how the ontic evil properly fits into the whole good end. In other words the ontic evil must be examined in relation to the goods both in particular (and in general. As Janssens has unambiguously remarked:

The question to which we refer here is known as the problem of the relation of the *debita proportio* and ontic evil. If the presence of ontic evil as such would always endanger the *debita proportio* of our action, it would be impossible to act morally, because it is impossible to prevent ontic evil. The danger lies in the fact that moral evil is mentioned too soon. This happens every time a moral judgment of an exterior act does not include a judgment of the end and of the agent. This is taking ontic evil for moral evil (1979:73).

Condition (iii): "We have the moral obligation to reduce as much as possible the ontic evil which comes about when we act" (Janssens 1979:79). This thesis is already implied in the first condition that ontic evil should never be the ultimate goal of our intention: but the focus of this condition is that we must preserve the proper proportion of the means to the end. It is immoral to will ontic evil which disproportionately obstructs the growth of the individual and society because the object of morality is to promote the individual and the society (see Janssens 1979:79-80). Humans have the moral obligation to lessen or prevent ontic evil where it must be prevented or lessened.

Janssens offers two reasons for this aspect of our moral obligation:

The first one follows from the definition of morality: moral activity fundamentally concerns the truly human development of man and society and the struggle against ontic evil which impedes this development. The secondly reason follows from the meaning of our activity in the world: by our activity we must turn the world of nature into a world of culture. In other words, our activity is ordered to the realization of the objective culture for the promotion of the subjective culture of each and everyone. In this respect ontic evil is anything which impedes the progress of objective culture and the increase of the share of each and everyone in the resources of objective culture (Janssens 1979:81).

Condition (iv): "In the actualization of a good end and the deliberation about the means to this end, the genuinely important question is what place this end has in the totality of human existence" (Janssens 1979:81). Asking this question enables the acting subject to assess the relation of the end to other important elements of the action and therefore helps the acting subject not to look at his/her action as something isolated from other things or events. As Janssens puts the idea:

To act, consequently, means that a subject actualizes his intentions in and by an active contact with reality. If we begin this way from the acting and willing subject, it is possible to look at our actions as something more than a succession of isolated, diversified and scattered acts (Janssens 1979:81).

As was mentioned earlier, the fulfillment of these four conditions depends on a person's acquisition of the virtues. Thus, Janssens reminds us of Aquinas' use of the virtues and their role in shaping a morally good action. Prudence, he points out, holds a special place among the virtues which dispose human subject to will and perform morally good action. This is to say that human reason which directs every act, must have within itself the virtue of prudence whose, "function is to safeguard the debita proportio of the means to morally good ends" (Janssens 1979:55; emphasis mine). Aquinas's own words on this issue are as follows:

... a moral virtue is ordained to the act of that virtue, which act is the end, as it were, of that virtue; whereas prudence, which is in the reason, is ordained to things directed to the end. For this reason various virtues are necessary. But right reason in regard to the very end of a virtue has no other goodness than the goodness of that virtue, in so far as the goodness of the reason is participated in each virtue (Ia IIae, q. 20, art. 3; emphasis mine).¹³

This means that for a person who has acquired the moral goodness of justice, or truthfulness, for instance, through

See also Aquinas' theory of the mean; "The Philosopher says ... that moral virtue is a habit of choosing the means" (Ia IIae, q. 64, art. 3). This reference to the philosopher, is to Aristotle. "There are three kinds of disposition, then, two of them vices, involving excess and deficiency respectively, and one a virtue, viz. the mean, and all are in a sense opposed to all ;..." (Aristotle *Nicomachean Ethics*, book II, 1108b 8-10).

intentional repetitive practices so that being just or telling the truth has become an habit of the person, he/she would be more prone to act towards the good, because a prudent person acts according to right reason.

The practical problem therefore seems to be how we can train ourselves to be virtuous, especially to be prudent. That is, being good habitual judges of means proportioned to our ends in-view (condition iii) and to the whole of human good (condition iv) that is their fundamental context so that in every instance of one's action, the agent is able to strike a mean between two extremes of excess and deficiency. Of course, it is possible that in some particular instances a virtuous person, that is, a person with habits of right reason, can sometimes misjudge this balance between two extremes, and fall into one of them because of his/her imperfect condition as a rational being. But he/she cannot nonetheless be termed a vicious or an immoral person on the basis of a particular instance of misjudgment. For in general, when all the particular instances of his/her actions/behavior are looked at, if he/she is virtuous he/she judges proportionate means.

Now that this work has examined what the father of natural law ethical theory has to say about the morality of human action, it is now well situated to examine how one

tradition¹⁴ of interpretation of this theory has applied it to question of the morality of IVF/ET technology. A textual exposition of one such work will be made first; and then its analysis of the morality of IVF/ET will be examined and criticized.

Textual exposition

Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation: Replies to Certain Questions of the Day.

This document has an introduction, three parts, and a conclusion. This work will make a summary exposition of this document accordingly.

Introduction

From the start, CDF acknowledges that a proper evaluation of the morality of IVF/ET and artificial insemination "presupposes a proper idea of the nature of the human person ... [because] it is only in keeping with his true nature that the human person can achieve self-realization as a 'unified totality': and this nature is at the same time corporal and spiritual" (1987:8; emphasis mine). Moreover, the "natural moral law expresses and lays down the purposes, rights and duties which are based upon the bodily and spiritual nature of the human person"

See footnote 8 above, Congregation.

(1987:8; emphasis mine). It then emphasized that this moral law "must be defined as the rational order whereby man is called by the Creator to direct and regulate his life and actions and in particular to make use of his own body" (CDF 1987:8; emphasis mine).

CDF points out that while the biological and medical sciences are resources for good, in that "they might constitute progress in the service of man," they may also be sources of evil since they "involve serious risks" (CDF 1987:5). CDF argues that "what is technically possible is not for that very reason morally admissible" (1987:10). In all these basic claims, CDF parallels views of Aquinas already explained more fully above.

Part I

Respect for human embryos

The effort of CDF in this section is "to respond to the numerous moral problems posed by the technical interventions upon the human being in the first phases of his life and upon the processes of conception" (1987:12). Regarding this, it states that the "human being must be respected-as a person-from the very first instant of his existence" (CDF 1987:12; emphasis mine) because "from fertilization the biological identity of a new human individual is already constituted" (CDF 1987:13). This status of the embryo it argues, "demands the unconditional respect that is morally

due to the human being in his bodily and spiritual totality" (CDF 1987:13-14).

Relying on the moral principle of proportionality, CDF argues that therapeutic medical procedures on the human embryo are morally right, if they do *"not involve disproportionate risks for it but are directed towards its healing, the improvement of its condition of health, or its individual survival"* (CDF 1987:15; italics original; emphasis mine).

In that connection, CDF entrusts the responsibility of ensuring the well-being of the fetus to its parents in these words. "Whatever the type of medical, surgical or other therapy, the free and informed consent of the parents is required, according to the deontological rules followed in the case of children" (CDF 1987:15; emphasis mine). It is quite clear that the basic moral standard CDF is applying on this issue is deontological, not one of proportionality. As will be shown, CDF's arguments against IVF/ET are also deontological in structure, rather than being based on proportionality issues. At the same time, however, CDF does offer some proportionalist thinking about IVF/ET in its worries about harm to embryos and about technological domination of human reproduction in the IVF/ET procedure.

Based on parental autonomy to assume medical responsibility towards the well-being of their embryonic offsprings CDF does use a proportionality argument as

already noted, regarding therapeutic interventions for embryos or fetuses:

strictly therapeutic intervention whose explicit objective is the healing of various maladies such as those stemming from chromosomal defects will, in principle, be considered desirable, provided it is directed to the true promotion of the personal well-being of the individual without doing harm to his integrity or worsening his conditions of life (1987;15-16; emphasis mine).

Other methods such as experimentation or research also need to be immoral because they "damage or impose grave and disproportionate risks upon embryos obtained *in vitro*" (CDF 1987:18).

In agreement with Janssens first condition, discussed above, CDF argues that: "*It is therefore not in conformity with the moral law deliberately to expose to death human embryos obtained 'in vitro'*" (CDF 1987:18-19).

Part II

**Interventions upon human procreation.
Homologous artificial fertilization: IVF/ET and artificial insemination between husband and wife.**

CDF begins this section with a definition of the subject matter and a clarification of its area of concern:

By "artificial procreation" or "artificial fertilization" are understood here the different technical procedures directed towards obtaining a human conception in a manner other than the sexual union of man and woman. This Instruction deals with fertilization of an ovum in a test-tube (in vitro fertilization) and artificial insemination through transfer into the woman's genital tracts of previously collected sperm (CDF 1987:21).

CDF begins its analysis by stating that "every human being is always to be accepted as a gift and blessing of God" (1987:23). CDF immediately adds a statement of the conclusion it will defend: "However, from the moral point of view a truly responsible procreation vis-a-vis the unborn child must be the fruit of marriage" (1987:23).

The reasoning to this conclusion begins with the premise that in CDF's view, there is a necessary connection between marital sexual intercourse and human reproduction, on one hand; and on the other hand, a necessary link between sexual intercourse of married couples and unity between them. Given this starting point, CDF poses the question: "What connection is required from the moral point of view between procreation and the conjugal act" (CDF 1987:26)? It then responds to this question with three related claims.

The first of these claims is this:

(a) The Church's teaching on marriage and human procreation, affirms the "inseparable connection, willed by God and unable to be broken by man on his own initiative, between two meanings of the conjugal act: the unitive meaning and the procreative meaning. Indeed, by its intimate structure, the conjugal act, while most closely uniting husband and wife, capacitates them for the generation of new lives, according to laws inscribed in the very being of man and of woman"... "By safeguarding both these essential aspects, the unitive and the procreative, the conjugal act preserves in its fullness the sense of true mutual love and its ordination towards man's exalted vocation to parenthood (1987:26; emphasis mine).

On the basis of the "inseparable connection" which CDF sees between the conjugal act and human reproduction, CDF argues that, "it is never permitted to separate these different aspects to such a degree as positively to exclude either the procreative intention or the conjugal relation" (1987:26-27).

In this light, CDF states that: "homologous artificial fertilization, in seeking a procreation which is not the fruit of a specific act of conjugal union, objectively effects" (1987:27) an end similar to that of "contraception" which "deliberately deprives the conjugal act of its openness to procreation and in this way brings about a voluntary dissociation of the ends of marriage" (CDF 1987:27). Therefore,

fertilization is licitly sought when it is the result of a "conjugal act which is per se suitable for the

generation of children to which marriage is ordered by its nature and by which the spouses become one flesh". But from the moral point of view procreation is deprived of its proper perfection when it is not desired as the fruit of the conjugal act, that is to say of the specific act of the spouses' union (CDF 1987:27; italics original, emphasis mine).

(b.) The second claim in response to CDF's question about the implications of its premise is the following: CDF holds that the "moral value of the intimate link between the goods of marriage and between the meanings of the conjugal act is based upon the unity of the human being, a unity involving body and spiritual soul" (1987:27). In this connection, CDF contends that the conjugal act is a "'language of the body'" involving "'spousal meanings' and parental ones" (1987:27); and that it "is an act that is inseparably corporal and spiritual" (CDF 1978:27). For it "is in their bodies and through their bodies that the spouses consummate their marriage and are able to become father and mother" (CDF 1987:27).

CDF then argues that this language of the bodies of married couples must be respected. This means that "the conjugal union must take place with respect for its openness to procreation; and the procreation of a person must be the fruit and the result of married love" (CDF 1987:27-28). From this, CDF concludes that "Fertilization achieved outside the bodies of the couple remains by this very fact deprived of the meanings and the values which are expressed in the

language of the body and in the union of human persons" (1987).

(c) Thirdly, CDF asserts that "Only respect for the link between the meanings of the conjugal act and respect for the unity of the human being make possible procreation in conformity with the dignity of the person" (1987:28). For this reason CDF argues that a child must be the product of his/her parents' love; and therefore he/she "cannot be desired or conceived as the product of an intervention of medical or biological techniques; that would be equivalent to reducing him/her to an object of scientific technology" (1987:28). For, CDF argues,

The moral relevance of the link between the meanings of the conjugal act and between the goods of marriage, as well as the unity of the human being and the dignity of his origin, demand that the procreation of a human person be brought about as the fruit of the conjugal act specific to the love between spouses (CDF 1987:28; emphasis mine).

The above having been said, CDF's asks: "Is homologous in vitro fertilization morally licit?" CDF has developed several arguments that are negative this question. Although it admits that for some couples, "recourse to homologous IVF and ET appears to be the only way of fulfilling their sincere desire for a child" (CDF 1987:29), CDF nevertheless insists that "IVF and ET certainly cannot be preferred to the acts of conjugal union, given the risks involved for the child and the difficulties of the procedure" (1987:29). Here

for a moment, it should be noted, CDF offers a proportionalist reasoning. But the basic structure of CDF's argument is deontological, holding that IVF/ET is immoral because it is unnatural.

CDF affirms that the "desire for a child - at the very least openness to" conceiving a child, "is a necessary prerequisite from the moral point of view for responsible human procreation" (CDF 1987:29); but CDF argues further, as Aquinas/Janssens have been seen to do, that having "good intention is not sufficient for making a positive moral evaluation of in vitro fertilization between spouses" (1987:29). At this point, however, CDF departs from the Aquinas/Janssens interpretation of natural law reasoning. For CDF now continues: "The process of IVF and ET must be judged in itself and cannot borrow its definitive moral quality from the totality of conjugal life of which it becomes part nor from the conjugal acts which may precede or follow it" (1987:29; emphasis mine).

Nor, CDF holds, would IVF/ET be permitted "even in a situation in which every precaution were taken to avoid the death of human embryos" (CDF 1987:30), because human fertilization outside the body of a woman "entrusts the life and identity of the embryos into the power of doctors and biologists and establishes the domination of technology over the origin and destiny of the human person" (1987:30; emphasis mine).

In CDF's perspective, then, even with the technical aspect of IVF/ET set aside, when the morality of the procedure is considered from rational point of view, it is still impermissible because IVF/ET "is neither in fact achieved nor positively willed as the expression and fruit of a specific act of the conjugal union" (1987:30; emphasis mine).

Homologous artificial insemination is evaluated, and morally condemned by CDF for the same basic non-proportionalist, deontological reasons it declares IVF/ET immoral, namely that such an act disassociates the two necessary meanings of the conjugal act. The following explanation may provide more light:

Artificial insemination as a substitute for the conjugal act is prohibited by reason of the voluntarily achieved dissociation of the two meanings of the conjugal action. Masturbation, through which the sperm is normally obtained, is another sign of this dissociation: even when it is done for the purpose of procreation, the act remains deprived of its unitive meaning (CDF 1987:32).

At this point CDF mentions two general criteria by which medical intervention in human reproduction, can be morally evaluated. The medical art is to be evaluated "with reference to its technical dimension" and "in relation to its goal which is the good of persons and their bodily and psychological health" (CDF 1987:32).

CDF also considers the suffering of married couples on account of infertility. It acknowledges that, on the part of these couples, "the desire for a child is natural"; and even affirms that "This desire can be even stronger if the couple is affected by sterility which appears incurable" (1987:33-34). Nevertheless, it claims that "marriage does not confer upon the spouses the right to have a child, but only the right to perform those natural acts which are *per se* ordered to procreation" (CDF 1987:34). Here the expression "per se ordered to creation" means acts in which the unitive and procreative meanings the CDF sees as necessarily connected have not been separated.

As an alternative to IVF/ET and artificial insemination CDF suggests "adoption, various forms of educational work and assistance to other families and to poor or handicapped children" (CDF 1987:34).

Part III

Moral and civil law

In this section CDF states that the right to life of every individual human being, the family, and marriage are basic human values, which form the foundation of an orderly civil society. It then calls on political and legislative authorities to intervene to limit immoral reproductive technologies "since an uncontrolled application of such techniques could lead to unforeseeable and damaging

consequences for civil society" (1987:35). Such an intervention would be necessary "to ensure the common good of people through the recognition of and the defense of fundamental rights and through the promotion of peace and of public morality" (CDF 1987:35). CDF acknowledges that there is "no sphere of life" in which the civil law can "take the place of conscience or dictate norms concerning things which are outside its competence" (1987:35-36). So civil law "must sometimes tolerate, for the sake of public order, things which it cannot forbid without a greater evil resulting" (CDF 1987:36). In this connection CDF identifies two sets of rights that must be protected by civil or political and legislative authorities:

(a) "every human being's right to life and physical integrity from the moment of conception until death; (b) the rights of the family and of marriage as an institution and, in this area, the child's right to be conceived, brought into the world and brought up by his parents" (CDF 1987:36).

CDF concludes its document by saying that: "In the light of the truth about the gift of human life and in the light of the moral principles which flow from that truth, everyone is invited to act in the area of responsibility proper to each..." (1987:40).

A critique Of CDF's version of natural law morality on IVF/ET and artificial insemination.

The exposition of CDF's argument above shows that at least two¹⁵ major lines of argument are developed in its non-proportionalist arguments that IVF/ET, is fundamentally morally vitiated. The first line of argument is based on the inseparability of conjugal act and its two meanings: the procreative and the unitive (love-giving).¹⁶ The second line of argument may be called the argument from respect for the conjugal act ("language of the body") and respect for the natural law (the link between the meanings of the conjugal act: the unitive and the procreative) argument. But these two lines of argument are essentially the same, except that CDF words them differently. For this reason, they will be treated as one, though under separate sub-sections. Moreover, because of this, any counter-argument that shows that CDF's basic moral norm, the natural law has been mistakenly applied to the conjugal act and its two meanings by CDF will automatically disprove both lines of arguments, because the first is the ground of the second.

. This distinction of the CDF's arguments into two main lines of argument is used by a number of commentators favorable to the CDF's position. See for example, "Catholic Moral Teaching On In Vitro Fertilization" by William E. May, in: *Reproductive Technologies, Marriage and The Church*; The Pope John XXIII Medical - Moral Research and Education Center, Rraintree, Massachusetts, 1988, p.109.

. Ibid.

To begin with CDF's first line of argument, a key point to note is the meaning of "natural" or "natural law" in relation to the conjugal act according to CDF. Nature here involves "an inseparable connection, willed by God and unable to be broken by man on his own initiative, between the two meanings of the conjugal act: the unitive meaning and the procreative meaning."¹⁷ According to a proponent of CDF's position, these unitive meaning and procreative meanings, are "love-giving" and "life-giving" respectively (see May 1988:109).¹⁸

In CDF's view, it is necessarily one and the same physical act which unites the marital partners in the expression of their love (unitive meaning) and in which they bring about the new life of a child (procreative). If either of these elements is absent, the act is viewed as radically deficient, both as not fulfilling the two aspects of human nature that it is this act's job to fulfill, and as not fulfilling the two aspects of the physical act itself, which is the second line of argument.

Because this connection, CDF holds, is necessary in the natural performance of the act, anything, that is, any human

. Henceforth, for philosophical reasons of terminology or phrasing, "will of God" or the "inseparable connection, willed by God ..." will be called "natural" or "natural law", except where their direct quotation is necessary..

. See footnotes 15 for this reference.

intervention separating the two meanings makes it unnatural. CDF argues that there is therefore a moral inseparable or a morally necessary connection between marital sexual intercourse and human reproduction, as well as a morally necessary link between sexual intercourse of married couples and unity between them. To deliberately prevent either aim or to deliberately separate them from occurring in one and the same act is therefore immoral precisely because it is, CDF holds, unnatural.

It is because of this pattern of argument that CDF's position is described here as deontological. The argument is grounded in a principle that what is necessary and natural alone is moral and therefore that what is counter to the necessary, natural pattern is immoral. This is a deontological, not a consequentialist mode of argument.

The above claim of CDF is flawed in three important respects. It is flawed on metaphysical or logical grounds. It is flawed from the point of view of moral evaluation. It is flawed on practical grounds. In addition, in the logic of CDF's arguments, there is an assumption that IVF/ET is analogous to contraception, which CDF believes had been demonstrated to be immoral years earlier.¹⁹ Thus it states:

. See *Encyclical Letter Of His Holiness Pope Paul VI On The Regulation Of Birth (Humanae Vitae) 1968, pp. 11-12*; John C. Ford, S.J., and Germain Grisez, "Contraception and the Infallibility of the Ordinary Magisterium" in: *The Teaching of Humanae Vitae A Defense: Is its Teaching Infallible? Are its Norms Defensible?* by John C. Ford et al, Ignatius Press, San Francisco, 1988, pp.119-219.

"Homologous artificial fertilization, in seeking a procreation which is not the fruit of a specific act of conjugal union, objectively effects an analogous separation between the goods and the meanings of marriage" (1987:27). This argument from analogy will also be shown to be mistaken.

The order of this critical work will be as follows: I. The metaphysical or logical flaw of the inseparability argument. II. The error from moral objectivism; III. The flaws of the inseparability argument on practical grounds. IV. The argument from analogy between contraception and IVF/ET. Then a fifth kind of claim by CDF, on marriage and the right to procreate, will be examined.

One thing needs to be pointed out first. It is clear from the exposition of CDF's arguments above that, although CDF makes frequent use of two sources of moral norms, that is, using both proportionality and deontological arguments, it relies principally on its deontological interpretation of natural law ethical standards in drawing its fundamental conclusion against the morality of IVF/ET and artificial insemination, without significant dependence on the proportionality issues. For example, with regard to proportionality criterion in IVF/ET, CDF mentions the proportionality theme in this way: "As with all medical interventions on patients, one must uphold as licit procedures carried out on the human embryo which respect the

life and integrity of the embryo and do not involve disproportionate risks for it ..."²⁰ But it is an unconditional deontological criterion based on CDF 's interpretation of the natural law moral tradition, that CDF considers decisive for the morality of IVF/ET. For example:

Science and technology requires, for their own intrinsic meaning, an unconditional respect for the fundamental criteria of the moral law: that is to say, they must be at the service of the human person, of his inalienable rights and his true and integral good according to the design and will of God (CDF 1987:7; emphasis mine).

One further preliminary point deserves notice. CDF, as an official teaching institution within the Roman Catholic Church, holds the theological position that the conclusions of its moral arguments are also human reason's best grasp of the will of God for human conduct. For CDF, God's will is an unconditional standard and humans are under an unconditional obligation to obey it. So it is not surprising that CDF's arguments about IVF/ET, are intended to reach unconditional conclusions, and so are deontological in character. But its arguments against IVF/ET in this document are of a philosophical, not a theological nature, as the above exposition has shown. Therefore it is appropriate here to subject them to a careful philosophical examination.

. This proportionality principle issue, will be considered in detail in the next two chapters.

The inseparability argument

(1) What does CDF mean by natural law? In this case, it refers to the natural or necessary connection, between sexual intercourse and human procreation, and a moral requirement not to separate them by human intervention. This means that an act of intercourse must both procreate and unite husband and wife, or at least must not be deliberately prevented by an human intervention from doing so, as IVF/ET does by moving the procreative event out of the conjugal act.²¹ But in Chapter Two, Aquinas' teaching on a "natural law" understanding of morality was seen to focus on the doing of good and avoidance of evil at the command of practical reason, not on a rigid concern with the material or, in this case, biological characteristics of an act.

To see this, consider that the way these two meanings of the conjugal act are intertwined in actual occurrences of the conjugal act, is such that it is not possible to claim that either of the two meanings ever takes precedence over the other²² or that they are necessarily of equal value to every couple performing the act in the biologically typical

. This is a rewording of Richard McCormick's clarification of the understanding of correct meaning of inseparability and will of God in conjugal act, as stated by CDF. See "*Human Rproduction: Dominion and Limits*" by Richard McCormick, in *Kennedy Institute of Ethics Journal*, Vol. 6, No. 4, Dec. 1996 p.390.

. Some authors prefer to say "hierarchical ordering of ends". See footnote 19, for source.

way. For some married couples, the unitive meaning has a fuller sense and meaning, linked as it is with mutual sexual gratification, or companionship, or friendship. For other couples the desire for children dominates. CDF's argument requires that such differences be viewed as unnatural because of the requirement that one and the same biological/physical act is unitive and procreative. But many conjugal acts do not procreate and many conjugal acts do not unite the marital partners in any way but externally, in spite of the partners' best intentions regarding both ends. The CDF does not explain why these aspects of the conjugal act are considered necessary and therefore are only considered natural when they are both present together, even though they so often occur separately. To claim that it is only when both occur together that the act is consistent with nature and therefore only then that human nature is properly fulfilled in this act, is to beg the fundamental question of what is natural here.

Nevertheless, as noted in the exposition, CDF holds in the first line of argument that: human material separation of the material-uniting-of-the-partners, and the materially-procreating a child (by making the activities materially parts of what CDF declares to be separate acts) is immoral because it involves both a material act and an intention that are contrary to the nature as CDF views it, of the

conjugal act as a material reality; that is, an act that is both materially unitive and materially procreative.

One author²³ in the natural law tradition of CDF has attempted to illuminate CDF's position by distinguishing the immediate and the ultimate reasons for the marital act. On the immediate reason, he wrote: "mutual attraction of man and woman and the desire for a common life is the more proximate cause for the marital act as we view it phenomenologically" (John M. Haas 1988:97). In other words, the most immediate and powerful reason why people marry in particular instances is "mutual attraction ... and the desire for a common life".

But in Haas' view, this immediate reason need not be the ultimate end as a metaphysician sees it. He writes:

However, the metaphysician wants to understand the marital act in its most general sense and sees that the end it ultimately serves is the generation of new life and the perpetuation of the species. As St. Augustine said, "What food is to the health of man, intercourse is to the health of the race". We need intercourse, and we need it because it generates babies (John M. Haas 1988:97).

In saying the above, Haas assumes that what is, for him, the most proximate end of the procreative act cannot be at the same time its ultimate end. In other words, he

²³ John M. Haas is one the ardent supporters of, and commentators on the CDF's document. See footnote 23 below.

assumes that the union of the spouses cannot be valued for its own value/good but only in connection with another end, procreation.

Haas also takes it for granted that "mutual attraction ... and the desire for a common life" is the only possible phenomenologically acceptable proximate reason for the marital act, on one hand; and that the "generation of new life and the perpetuation of the species" are the only existing, possible and acceptable metaphysically ultimate reasons for marital act on the other hand. Nevertheless, he writes paradoxically: "The good of procreation is in a sense more **fundamental** in intercourse than the other goods of mutual support or sexual gratification" (Haas 1988:97; italics original).

Admittedly, this claim could be true for some couple, especially those who value and have need for children. But it would not be necessarily true for every married couple, especially those in old age who are not burdened by any lack of children, not necessarily because they do not value or need them, but because they do not need them in the metaphysical sense Haas wrote above. This means that for these old couples, the so-called phenomenological reason for the conjugal act, "mutual support or sexual gratification" would take precedence for them, and the so-called "metaphysical ultimate reason" would not even be available. This is to say that what is adequate as an explanation for

one couple's conjugal act, may be inadequate for another's conjugal act. The unity of the two meanings that CDF takes as necessary and normative because natural is not even available for many instances of the conjugal act.

If the goods/ends under consideration are of value only when united, as CDF holds, then should not a married couple that seeks one of the meanings as their end or value, but does not necessarily seek the other be at the risk of deep contradiction or other unnatural condition? Yet, as has been argued already, there are numerous conjugal acts without children in which the couples are very united, just as there are countless conjugal acts leading to children, but without the unitive meaning. Of course, the mere fact that such acts occur does not itself demonstrate their naturalness or moral rectitude. The point is rather that CDF's metaphysical premise that the two meanings occur together necessarily in the natural material realm is false.

Moreover, simple precedence of one over the other is not the only alternative to the inseparability of the two ends that CDF argues for. Procreation can also be the basis of unity, as it is among most couples in Nigeria, the country of the author. This is because, in that country, the conjugal act without children as one of its goods is itself readily dispensable. In other words, procreation gives meaning to conjugal act as unitive and to its other goods as well.

Similarly, mutual help to each other can be the primary reason for the unity between husband and wife; and this in turn can give meaning to conjugal act, so neither the conjugal act nor procreation need be the primary focus in their marital relationship. For example, suppose a wealthy physically challenged 84 year old man, mutually agrees with an intelligent and caring 80 year old and poor woman to marry primarily for mutual help. The husband would provide the wife and her poor relatives economic assistance for their present and future well-being. The woman would provide the husband with domestic and other needed care until death and execute his will after death. They are faithful to their promises and agreement and may be quite happy. Although they have non-procreative (because of age) marital intercourse, it does not matter to them as much as their commitment to mutual help that binds them faithfully together till death.

In such a marriage, there is unity and love, guaranteed by the type of help both of them committed to each other. This is an example to show that neither the conjugal act nor procreation is necessary to give meaning to every instance of marriage. It is what the couple cherish most that is the primary meaning to marriage and that is what unites them. In this story, it is mutual help and love for each other.

CDF clearly expresses its claim that there is a natural law of inseparability in the conjugal act between material procreation and material unity, in statements like the

following: "By safeguarding both these essential aspects, the unitive and the procreative, the conjugal act preserves in its fullness the sense of true mutual love and its ordination towards man's exalted vocation to parenthood." This claim is insupportable for two reasons: (1) The inability of conjugal act to produce children sometimes, compels one to ask: what essential aspects of conjugal act is to be preserved if this act cannot produce one of its two essential ends or meanings? Conjugal act can then only preserve what it produces, namely its unitive value, not what it cannot produce, namely a genetic child, because infertility reduces it to a non-functional state with regard to procreation.

(2) The clause: "By safeguarding both these essential aspects, the unitive and the procreative, the conjugal act preserves in its fullness ..." holds a self-defeating implication. The implication is that the natural law (in CDF's sense) in conjugal act with regard to its two essential meanings can only be truly (fullness) natural law, when the two meanings are present. Or as some advocates of CDF's position put it "the full meaning of the conjugal act cannot be preserved unless both meanings are acknowledged" (Haas 1988:101). Haas goes ahead to defend the metaphysical or natural connection between conjugal act and its two meanings by saying:

"The Church, through the contemporary language of the inseparability of the unitive and procreative meanings of marriage, is doing what the metaphysician had done in the past. She is merely describing the reality of marital union and saying that it ultimately does not make sense unless both meanings are recognized and respected in each and every conjugal act." (1988:101).

The point that is being defended in this section's argument is that in reality, although some married couples recognize and respect the view that procreation and unity between them as spouses is valuable, (and worth preserving), the inability of conjugal act to procreate sometimes, even when every single act of conjugal act is open to procreation, makes this claim metaphysical flawed and logically unacceptable. For it to be acceptable, both conditions must be present, whenever the act can plausibly be called natural. If not, then either nature is itself sometimes incomplete and therefore insufficient, or CDF is begging the question of what is natural and appropriate for human conduct.

The two material aspects of the conjugal act are not only distinguishable, they are also separable as the various example above clearly show. Therefore the inseparability argument is metaphysically flawed.

The error of moral objectivism

Another major weakness of CDF's moral contention against IVF/ET is its assertion that "the process of IVF and ET must be judged in itself and cannot borrow its definitive moral quality from the totality of conjugal life of which it becomes part nor from the conjugal acts which may precede or follow it." According to Janssens, "this is one of the currents of thought contested by Thomas" (1979:68). Among other things, this moral judgment reveals a narrow focus on an act viewed materially without due consideration to other valuable elements relative to the act. For as Janssens attests, "According to Thomas a moral evaluation is only possible about a concrete action, considered as a whole, composed of end and means" (Janssens 1979:68). The claim of Aquinas is indicated by the very definition or meaning of means; namely "means involves being-related-to-the-end" (Janssens 1979:68). A material act undertaken as a means therefore, "is not subject to a judgment that considers it as an absolutely unrelated thing. The judgment must judge the debita proportio of the means by virtue of which the totality of the act participates in the moral goodness of the end" (Janssens 1979:68-69; emphasis mine).

CDF while on one hand acknowledging that "one cannot ignore the legitimate aspirations of sterile couples", disregards those aspirations on the other hand as relevant to the morality of IVF/ET. Instead CDF judges the process of

IVF/ET solely by itself without regard to the intentions of childless couple and the medical team who are involved in the process of IVF/ET. Previous discussion has made it clear that mere legitimate good intention is not sufficient by itself to assure the morality of an act. But CDF's argument, falls into the opposite error of moral objectivism - a focus on the act or object alone; this is a view Aquinas carefully avoided in his teaching on natural law morality, as was demonstrated earlier.

The previous analysis of the structure of human action as expounded by Aquinas shows the exact opposite of CDF's claim that an act can be morally judged *per se* without reference to the human subject from whom the act originates. In that analysis, it was clear that no human act can morally be evaluated solely by itself without reference to the human subject who is the origin of the activity. For it is the human subject that gives meaning to his/her activity not vice versa. This is not to imply a subjectivistic interpretation of human action which seeks to judge the moral legitimacy of an human action from the point of view of the human individual alone - a stance which Aquinas also carefully avoided. It was already indicated in Aquinas' position that human actions are not to be considered merely as "a succession of separate and disjointed actions but as the integrated moments of a life history in which unity and wholeness can be realized..." (Janssens 1979:43). In this

context, the action has to be judged by all four of the conditions articulated by Janssens above.

That is, since the moral legitimacy of an human action can neither be evaluated only from the moral horizon of the human subject involved in the act, nor purely from the angle of the material act itself without reference to the performer of the act, then the morally reasonable step is to take into consideration all the valuable elements on both sides of the equation of means and end, in order to determine whether an individual or group of individuals might proceed with an action or not. In other words, the whole package of all relevant issues and elements that are involved in an act, both materially and formally, should be duly considered. A moral judgment must attend to the means, (material element) needed to achieve an end (formal element), as surely as it must attend to the end. Consequently, a moral judgment must not focus solely on the material actions involved - the material process of IVF/ET - without reference to the end of the subject who is pursuing them - procreation. For these material actions are not considered as properly human actions except in relation to the willed pursuit of an end in which they are grounded.

The exposition above, of Aquinas's teaching about the morality of an human act as interpreted by Janssens, showed that "the inner act of the will (end/formal element) and the exterior act (means/material element) are one and the same

concrete act" (Janssens 1979:49). In this understanding, Aquinas concluded that the "end" and "means" relationship, "must also be treated as one from the moral viewpoint" (Janssens 1979:49). With this consistency of thought, Aquinas "reacted sharply against those who are of the opinion that the material event of an act can be evaluated morally without consideration of the subject, of the inner act of the will or of the end" (Janssens 1979:49).

For our purposes then, if IVF/ET is

considered as nothing but the material event ... [it] is an abstraction to which a moral evaluation cannot be applied. This object-event becomes a concrete human act only insofar as it is directed towards an event within the inner act of the will. Only this concrete totality has a moral meaning. It is the end of the inner act of the will which specifies the malice or the goodness of the act (Janssens 1979:49; emphasis mine).

IVF/ET as an act is neither separated nor separable from the human reason which directs itself to act or from the end for which the human reason acts, nor from the proper nature of the human person who is necessarily connected to this act as its origin, and can in no way be separated from it. If an human act always originates from a person, then it is mistaken to say that the act can be judged either as good or bad by itself because an act, cannot act itself. Thus IVF/ET as means cannot perform or be considered in terms of any rational or intentional activity.

to bring about an end. In fact, if it were true as CDF claims that IVF/ET can be judged by itself, the claim that CDF also makes that it may cause harm to the embryo would then make no sense at all, because causing harm refers to an other (somebody/something else) that is affected as a result. In other words, if this act is truly judged by itself, then CDF's judgment would have to refer to nothing beyond the act itself, either as cause or effect. "According to Thomas a moral evaluation is only possible about a concrete action, considered as a whole" (Janssens 1979:69).

An accurate understanding of Aquinas' criteria for judging the morality of human action, indicates that, when reason engages in moral judgment it employs both proportionalist and deontological (the intended end) criteria to do such judging correctly. In Aquinas' standard, when an human person pursues what reason recognizes as a good end, through what it also recognizes as a good means, his/her action would be considered perfectly moral. But when on the other hand, reason recognizes the end as evil and intends that evil, automatically the action becomes perfectly immoral; in which case the agent's action can be referred to as out of character, or contrary to his/her proper condition in his/her capacity as a participator in eternal reason - moral law - do good and avoid evil.

Now in this account, even when reason recognizes and intends a good end, the material action or means to the end,

can still be immoral if it is disproportionate to the intended good/end, or if disproportionate to other aspects of human good. CDF however would say that the criterion is whether the act is unnatural in itself, an act contrary to nature. In fact according to Aquinas, if as much commensurate or adequately proportionate means is used, though ontic evil may still occur, the action is still moral, although it may not be perfectly good as was seen in the discussion of means, examined earlier. In such a situation, some undesired and regrettable evil will occur, what Janssens refers to as "ontic evil" - an ambiguity in some human actions. But in such cases, as long as the end is good (the deontological element), the other question is whether the means producing evil produce even more good and are, in comparison with other possibilities, the best possible in the situation.

One legitimate aspiration of an infertile couple which CDF should have considered in the moral issue of IVF/ET and artificial insemination, is the infertile couple's desire to have children - a desire which is in conformity with CDF's pre-condition for responsible human procreation. For example CDF says: "The desire for a child-or at the very least an openness to the transmission of life-is a necessary prerequisite from the moral point of view for responsible human procreation" (1987;29).

To be sure, again CDF is correct to say that "good intention alone is not sufficient for making a positive moral evaluation of *in vitro* fertilization". But good intention is not the only moral criterion involved in this procedure. There are several positive values at stake in the process: the immediate and future well-being of the infertile couple and those of the larger community of the couple in some cultures where child bearing and rearing are in most cases the main sustenance of a marriage. There is also the unity which having one's own genetic child fosters between spouses, especially in cultures where this unity is threatened by childlessness; there is the conjugal life of the couple that continues in spite of IVF/ET; and above all there is the child who is desired.

There are also disvalues to be considered: the suffering of the infertile couple; the suffering of the larger community especially in cultures where childlessness is one of the causes of the break up of some families; possible harms to the desired child - physical, psychological and even death; and harms of physical injury specific to the mother. These values and disvalues, are the essential elements that are involved in the proposed act that must be taken into consideration in order for a moral judgment to be made fairly. Instead, CDF dismisses them in support of a deontological moral evaluation of a material

act in itself, independent of its formal characteristics as an object of human choice.

It should be quite obvious now, that an application of Aquinas' deontological teaching about the morality of any human action, including the processes of IVF/ET, shows that IVF/ET does not have any moral meaning except with reference to the human agent who wills both the end (the child) and the means (IVF/ET) toward that end (the child); and that all things considered, this means-end-combination is the principal criterion for the determination or the morality of this procedure. As Aquinas would see it, considering the good and evil involved in this procedure, the good end to be achieved, is still proportionately higher than the comparative evil involved; so that this procedure is morally justified, in spite of the potential inherent evil (ontic evil) in it.

How much these values and disvalues mean to the couples and the larger society, should all be taken into critical consideration to judge the morality of IVF/ET; or to decide whether to perform an act or not when there is a conflict in moral demands. A specific case might help to clarify the issue. Can the most serious disvalue - the death of the embryo, which is probable in the procedure of IVF/ET, outweigh the weightiest value, the live birth of a child, which is also possible in the act of IVF/ET? As JoAnn V. Pinkerton, and James J. Finnerty, worded the idea: "This is

not a choice between absolute good and evil but an attempt to balance two competing interests, both of which pose nearly equal moral worth" (1996:292; emphasis mine). Note that the death or life of the embryo at stake only has meaning in relation to an human society or other human beings who desire the life of embryo and equally do not desire the death of the embryo; but who never-the-less, must do the balancing or proportionate reasoning.

If the embryos dies, the sufferings of the infertile couple, and in some cases the larger community of the couple that are associated with infertility continues. Worse still, other disvalues closely related to the death of the embryo may arise to worsen the existing sufferings of those affected by its death. For example, a more depressed and daunted life of existence is more likely than not to set in. To the contrary, if the embryo survives, the sufferings of the childless couple would discontinue, at least in the sense associated with infertility. But more importantly, other values that are in direct relationship with the survival of the embryo will even augment the overall well-being of the parents. For example, a more lively and joyful and hopeful life is more likely than not to arise. As Mbiti says, "every birth is the arrival of 'spring' when life shoots out and the community thrives" (1969:110).

But since it is equally true that death of an embryo brings sorrow, the persons who must do the balancing, or

proportionate reasoning, must consider which is more valuable, life or risk of death? In the opinion of this author, life is certainly more valuable. Therefore, in this specific sense, IVF/ET would not be a morally disproportionate means of human conception, even when it involves the risk of loss of life, because life is more valuable than death.

In view of all the arguments above, it is therefore doubtful whether CDF's arguments about (1) the inseparability of conjugal act from its procreative and unitive meanings; (2) that the morality of IVF/ET can be judged by itself, and so (3) that IVF/ET is unnatural, can convince anyone not already committed to the policy which advocates and insists on the exclusive use of "conjugal act" for human conception, given the helplessness to which infertility reduces some married couples.

Inseparability argument flawed on practical grounds

Moreover, if it is true that there is such a necessary natural law binding the conjugal act to its supposed two meanings, then artificial means such as contraceptives and natural processes such as infertility, which prevent conception, and human interventions such as IVF/ET and artificial insemination, that produce human life outside of conjugal act, should not practically have been able to prevent or cause human conception. That is, the ability of

both contraceptives and sterility to sever this so-called essential relation between conjugal act and its two meanings undercut the claim that this is a natural law. They give evidence that the connection between the conjugal act and its purported two meanings or ends is of a different sort than claimed by CDF.

As has already been hinted at, there is to the contrary no natural necessary connection between conjugal act and its two so-called essential meanings. That is, conjugal act is separable from unity and procreation. The biological or physiological constitution of a woman that prevents her from becoming pregnant at some periods in her reproductive years (safe period) is another evidence of a dissociation between conjugal act and procreation. Properly understood in its rigorous logical end, procreation can never occur during this period. This means that given this safe period, natural law in CDF's understanding as something necessary, is more applicable to the dissociation between conjugal act and procreation, than it is between conjugal act and procreation for reason already given. In addition, this dissociation is evidence of an intelligent and responsible mind that sees the totality of human needs with regard to conjugal act and its procreative meaning. It is also an evidence that human reproduction must be seen in context. Human beings run into serious moral difficulty when they focus narrowly on a specific meaning of something - a word or action. They

should be open to other possible meanings of such words or actions. Those other meanings can never be known or appreciated except with reference to the individual or group of individuals that give it meaning.

What is important is how, those who should benefit from the value of this natural mechanism in a woman, use it for their purposes and general well-being. All things considered, does the use fit into their overall life's purposes or not? A similar question must precede any moral question regarding IVF/ET and artificial insemination.

Thus if one holds: all that is natural is *ipso facto* good without qualification, then the natural device in the female constitution which prevents her from conceiving children is also good, regardless of how it is used to achieve some ends. Similarly, if one holds that all that is unnatural (no necessity) is by this very fact bad without qualification, then all intelligent human products which achieve certain ends are bad regardless of their ends.

Some moralists have pointed out with concern the implications of the inseparability of the unitive and the procreative meanings of conjugal act in marriage, which IVF/ET is said to sever. For example McCormick has asked in connection with the two meanings of conjugal act:

Specifically, must these be held together in every act (thus no contraception or IVF), or is it sufficient that the *spheres* be held together, so that there is no

procreation apart from marriage, and no full sexual intimacy apart from a context of responsibility for procreation (1996:391)?

McCormick's question is apt in that there are infertile couples who in spite of their engagement in conjugal act, remain both childless and united in marriage. It is possible that such couples, though they may believe that having genetic children in marriage, is both meaningful and valuable, but they may not be the most meaningful and valuable reasons why some people marry; or the only reason for marriage. As has already been shown, it is possible to find couples in marriages in which conjugal act itself is excluded from the beginning; yet they are united because of the help they offer one another.

It therefore can be argued that procreation or procreative intention need not be a criterion for marriage, or for conjugal act. In other words, these conditions ought to be separated from marriage because of other primary reasons why some people marry: friendship, companionship, love, or for mutual help; though these people need not reject the procreative meaning or value of marriage or conjugal act. It is the value which they cherish most that impels them into and unites them in marriage.

Now would conjugal act in such marriages be condemned as unnatural or immoral because they did not produce children? Predictably, the answer to this question is: no. For if conjugal act is condemned in such cases, the

condemner is faced with the problem of legitimizing conjugal act in marriages, which by the constitution of a woman's body (menopause, or safe period of a woman during her reproductive years according to natural law), human conception is excluded *ab initio*.

The point of this analysis should therefore be clear: what is preventive or procreative of human life, does not necessarily by this very fact of being preventive, or procreative within, or outside of what is stipulated as natural law, become unnatural or immoral (when human action is involved), except in the proper view of the totality of means-end package which must involve a *debita proportio*.

It has been argued in this section that, if it was true that there is such a necessary connection between conjugal act and its two alleged two meaning - unitive and procreative meanings then, nothing can practically prevent conjugal act from achieving these two meanings. This section of the dissertation has shown that negatively, infertility and artificial contraceptive devices can successfully prevent conjugal act from attaining these two meanings or at least one of them, thereby calling into question the alleged necessary connection. Positively, IVF/ET can successfully produce human conception even where conjugal act has failed to achieve at least one of its alleged two necessary meanings, thereby again, challenging the claim of a necessary connection between conjugal act and its two

alleged meanings. Moreover, conjugal act itself sometimes, is unable in practical terms to realize its two supposed meanings as has been shown. Therefore, the inseparability argument of CDF is flawed on practical grounds.

The analogy between contraception and IVF/ET argument.

A question that arises from CDF's inseparability claim is: what is the human intervention or initiative that can dissociate this natural law between conjugal act and its two meanings? For CDF there are two factors. The first is contraception: "Contraception deliberately deprives the conjugal act of its openness to procreation and in this way brings about a voluntary dissociation of the ends of marriage" (CDF 1979:27). The second is IVF/ET by analogy: "Homologous artificial fertilization, in seeking a procreation which is not the fruit of a specific act of conjugal union, objectively effects an analogous separation between the goods and the meanings of marriage" (1987:27).

CDF claims that it is in the nature of the conjugal act that it necessarily has two meanings: unitive meaning and the procreative meaning; and CDF argues that contraception and IVF/ET both violate this natural pattern and for closely analogous reasons. But CDF's reasoning on this point is flawed because of the profound disanalogies between them.

Contraception is an human intervention which actively prevents procreation. Infertility, though sometimes

attributive to some human causes, is ordinarily not a result of human action; it is a physical evil, that prevents procreation. That is, the interference with procreation is profoundly different in the two instances. In addition, the two actions work in opposite directions, both causally (materially) and in the actors intentions (formally). Contraception prevents conception/procreation; IVF/ET, when successful, brings about conception/procreation. In order to claim that the two activities are closely analogous, CDF, must overlook profound metaphysical and moral differences between the two acts.

Therefore, it is inappropriate for CDF to use the analogy between contraception and IVF/ET in relation to the two meanings or ends of conjugal act, because while contraception could prevent human conception, but not conjugal act, IVF/ET neither prevents the procreative nor the unitive meanings of conjugal act. But contraception by preventing procreation, does not as a matter of fact prevent conjugal act nor its other relevant meaning - unitive meaning, conjugal act is not necessarily procreative and unitive. On this foundation, that it is not necessarily procreative and unitive, a couple may opt to use conjugal act as a means to the attainment of one of the benefits of marriage - the right to conjugal act which may or may not be open to procreation to some couples.

Since in reality IVF/ET is causative while contraception is preventive of human procreation, the two concepts are not the same. Therefore, it is a category mistake to assert that creating life and preventing life are analogous in the practical sense of achieving the same meaning or valued end. The analogy between contraceptives and IVF/ET is itself analogous to saying that: a person who prevents the drowning of an only child of his/her parents, stands on the same moral judgment platform as a person who willfully causes the drowning of an only child of his/her parents. To be, and not to be, are conceptually opposed to each other. This is to say that some similarities between contraceptives and IVF/ET are not worth examining. But the moral judgment about contraception, even if it were justified, would not therefore (by reason of that justification) pass on to IVF/ET. So, the analogy does not hold.

In addition, whether or not IVF/ET succeeds, normal sexual intercourse between husband and wife continues. Still, IVF/ET by design is geared towards procreation; which means that, there is procreative intention, to say the least. In its proper context, IVF/ET "in seeking a procreation which is not the fruit of a specific act of conjugal union" simply means that, another method of reproducing human life is used instead of conjugal act under

a specific circumstance; which hampers one of the ends of conjugal act.

Marriage and the right to procreate argument

There is a further inconsistency in CDF's arguments against IVF/ET. CDF maintains that every conjugal act is procreative in nature and at the same time holds the view that spouses are unjustified in defending IVF/ET by claiming that non-procreative conjugal acts are defective and they may therefore, by right, act to correct them. If there is no such right, then the procreateness of the act would seem to be a contingent matter, not something with the necessity of nature. Also, CDF argues that "marriage does not confer upon the spouses the right to have a child, but only the right to perform those natural acts which are *per se* ordered to procreation" (CDF 1987:34). But CDF does not offer any coherent development of this argument in support of their claims about a right to have children or its absence, nor any further explanation of the relation of such a rights-based position to the morality of IVF/ET. Lack of any further argument by CDF on this claim gives no ground for further criticism here.

Conclusion

In its own right, IVF/ET is a valued means, of human reproduction, the use of which originates from two rational (proper to nature) persons a married couple who are bound together by mutual love, a love out of which this couple mutually desires, seeks and expects a child - the fruit of their mutual love. Many people will readily approve of the view that, mutual love, not conjugal act is the major reason for couples to desire to have a child, that it is mutual love not conjugal act that unites husband and wife and enables them to endure one another's hardships mutually. This very process does not in any way prevent couples from engaging in marital sexual intercourse in its unitive meaning.

Opponents would agree that a good intention is good in itself; that is, abstractly and that a bad intention, is also bad in itself, also abstractly. Opponents would also concede to the view that a good means in itself (abstractly) is good; just as they would consent that a bad means is bad in itself (abstractly). Now as was demonstrated earlier, in Aquinas' view, if an intention (form/formal) is good and the means (mater/material) to achieve that good (formal) intention is also good, then the action is also morally good. This would be a good will, willing a good act. Similarly, if an intention (form/formal) is bad and the means (mater/material) is bad, then the action is also bad

or immoral. This would be a bad will, willing a bad act. But if an intention (form/formal) is good but the means (mater/material) is a mixture of good and bad in that it produces both good and bad results, then the act may not necessarily be bad, depending on the proportion of ontic evil in the means (material element) involved in the achievement of the good (formal) intention or the overall good in the one act. This would be a good will, not necessarily willing a bad means but willing the proportionately greater good involved in the integration of the good and the bad.

An act such as IVF/ET can never be judged morally by itself. On the contrary a moral evaluation of any act IVF/ET for example is only possible if it is an evaluation made from the point of view of the totality of this act which involves means and end. So, in IVF/ET one must consider the totality of the process of this procedure, when one considers whether or not IVF/ET and artificial insemination as means negates the requirement of love which a couple has for each other and which in turn, flows into a desire for a child or responsible parenthood through IVF/ET.

All of CDF's arguments are profoundly flawed and fail to demonstrate that IVF/ET is an inherently immoral act vis-a-vis Aquinas methodology for the moral evaluation of any human action. Further consequentialist or proportionalist

arguments for and against human embryos, based on Aquinas' teaching will be carefully examined in the next chapter.

CHAPTER FOUR

THE VALUE AND DISVALUE OF IVF/ET: A CONSEQUENTIALIST EXAMINATION OF HARM/BENEFIT REVISITED

Harm and benefit of present policy.

It has been demonstrated that one malformation or dysfunction in either the male or female reproductive system is sufficient to cause infertility - a condition that renders human conception through the ordinary means impotent. The preceding chapter has shown that IVF/ET is not morally objectionable for the deontological reasons proposed by CDF.

This chapter will offer a proportionalist or consequentialist analysis of IVF/ET with reference to some of its specific harms and benefits. This consequentialist examination will assume the appropriateness of the criterion of *debita proportio* for the moral justification of a human action, as explained in Chapter Three. It will argue that in general, humanity will be better off with IVF/ET than without it. In particular, it will also argue that infertile couples who seek children in Nigeria will be better off with IVF/ET available than without it. For the value attached to child-bearing (human life) in marriages in that culture

holds children to be priceless and irreplaceable. This chapter shall endeavor to give a careful and detailed analysis of the harms and benefits to IVF/ET involves. The thesis of this chapter is that a strong consequentialist moral justification for supporting IVF/ET can be made. The chapter will first show that bearing genetic children and the unity of spouses are among the primary reasons and values for marriage, both within the perspective of CDF being examined here and within the cultural tradition in Nigeria. Secondly there will be an examination of the most important of the harms or projected harms of this technology, followed by an examination of the most important of the benefits. The Third section of the chapter will first examine psychological harm. The chapter will then focus in more detail on some of the possible harms of IVF/ET using the scenario of ectopic pregnancy and spontaneous abortion as illustrations of three other specific possible harms of IVF/ET - the death of embryos; physical harm, that is deformity; and harm to the embryo's mother.

The goal of all this is to demonstrate that the values generally achieved by IVF/ET outweigh its commonest disvalues. Supporting such a thesis demands a careful analysis of the benefits and harms of this technology. This

analysis must neither ignore how much the means (IVF/ET) and its end (genetic child) which IVF/ET seeks are valued by those who seek them, nor treat the human subjects who actually value the means and end (IVF/ET and child respectively), as if they, themselves, do not matter or not valuable.

The most important singular value among other values or particular goods which IVF/ET seeks to procure is a child. This good, together with unity of spouses are among the goods valued by people who enter into marriage for the sake of a specific good or goods, such as the unity of spouses and their respective families. In addition to the specific good or value such as the unity of spouses and their respective families, are the happiness and joy, etc., bearing of a genetic child by infertile couples brings to all who are affected by this child's birth. The most general good that IVF/ET will yield is the well-being of infertile couples and society.

Infertility is the prevalent evil which the procedure of IVF/ET wants to alleviate. This major evil, can also be accompanied by other evils such as sufferings of pain and misery or anguish to childless couples and their families in particular, but also social evils in general such as prostitution and divorce of spouses.¹

. The social evils will be discussed in the next chapter. It was just important to mention it here.

Therefore, a comparison of the facts about having or not having IVF/ET and of the values and disvalues of having or not having it and arguments based on these facts, values and disvalues, will be necessary here. The chapter will make extensive use of the work of CDF discussed above because it is one of the best known philosophical writings on the moral problems of IVF/ET so far. Although that work principally develops a deontological argument against IVF/ET nonetheless develops some consequentialist or proportionalist arguments as well. For example, it says

As with all medical interventions on patients, one must uphold as licit procedures carried out on the human embryo which respect the life and integrity of the embryo and do not involve disproportionate risks for it but are directed towards its healing, the improvement of its condition of health, or its individual survival (CDF 1987:15).

The value of children (human life)

This chapter will assume the position on the value of children that is taken by CDF. It will be demonstrated here that CDF's consequentialist comments against IVF/ET fail (they are not fully developed arguments). That is, on the basis of CDF's value assumptions about the two essential meanings of marital sexual act (conjugal act), the unitive meaning (love of the spouses) and the procreative meaning (value of the child), IVF/ET is in fact morally justified.

CDF's consequentialist or proportionalist reasoning is based on the view that children are a value without which the continuation of the human species is impossible. Most people would agree that the life or value of a child as a human being is of great value because as most people would also agree that children are one of the central reasons for the labors of their parents in particular and society in general, and they are the hope of our future. Moreover, children are the only link between past and future human generations; they are a necessary gateway to future generation, a necessary means without which posterity has no meaning. Again, for sake of clarity, all the above values of children are assumed here on the basis of CDF's position that procreation and unity of spouses are necessarily linked to conjugal act. CDF's deontological position that IVF/ET, because it separates these two elements of this act, is unnatural, hence immoral. It's consequentialist comments stress the risk and harms of IVF/ET, although CDF does not develop a full consequentialist argument. But like CDF's deontological position, its consequentialist comments also fail to show that IVF/ET is immoral.

Obviously, not every married couple is infertile, so the human race will in general continue in existence, but not in every particular instance. But the human race did not begin in general but with particular instances of male and female having sexual intercourse, without which there would

have been no human race in general. So it would be a mistake not to take care of any particular infertile marriage seeking children both for their own well-being and as a contribution to the general well-being of humanity.

But it is just the conjugal act which CDF emphasizes, that brings about unity of spouses; children also play a pivotal role in the unity of husband and wife in marriage. For without them many marriages would more easily break up than they do today. Haas attests to this fact in the following words:

"Even the bond of marriage comes to be understood as indissoluble *because of the child*, the procreative good." Marital indissolubility serves the procreative good because it firmly establishes the common, stable life which will provide the necessary context for the nurture and care of the child(1988:97; emphasis original).

Haas is right. If spouses do not provide a stable place for the nurture of their offsprings, then they run the risk of harming them sometimes seriously, even to the point of ruining the basis for other future lives. Children are so valuable that many married people would do anything within their power and accepted moral rules to have children, especially those who enter into marriage primarily for the sake of bearing children. But this point can also be made of anything that some people need for survival. As has already

been demonstrated, the current cases of IVF/ET where couples pay exorbitant amount of money to procure one are good examples. This example assumes those who developed this technology to help infertile couples who desire to have children realize the importance of children in human well being. Also as has been stated already, the fact that prior to IVF/ET couples in some parts of the world used (as they still do) such culturally accepted means, such as polygamy to bear and rear children is another important point to establish the value of children to maintain human existence.

The following is a true story. A couple divorced with one child. Both remarried. Although they attempted to have their own children with their new spouses, they failed. After several years of fruitless attempts, both parties gave up their attempts, but were still happy in their new marriages. The child of the first marriage grew up and was devastated by the divorce of his parents. The teenager arranged six different meetings with his father and mother in which serious discursive attempts were made to reconcile them. All failed. The teenager decided to attempt a seventh meeting using a different method of approach. On the appointed day, he arranged for his father and mother to meet him in a well known restaurant.

After their meal the party set off for the boy's room at school. On the way close the school, the boy said, "I am so hungry." His and mother were surprised at his utterance.

"You just had a big meal, what is the matter with you?" they inquired surprisingly. The boy said, "Mom and Dad, you know, I am hungry for you not food; I am hungry for your love not hungry for food. You both brought me into the world and left me without you and without your love." At this utterance, almost simultaneously, the father and mother called him by his name, and each of them saying, "You know I love you." The boy replied, "I don't need the "I" of your love. I need the "we" of your love. I have been hungry for your "we" love, and it seems I will always be hungry for it.' At this point, the father and mother turned to each other, then to their son and the three hugged themselves and were resolved to come back together, as indeed they did.

The point of this story is principally to illustrate two key issues; namely (1) Neither the disvalue that prompted the divorce of the boy's parents in their first marriage, nor the conjugal act with all its gratification in their new marriages, was sufficient to keep them from the powerful effect the words of their genetic child had on them, a powerful value, before which mere marriage or marital sexual intercourse was helpless. (2) In these people's lives, children are the most essential values, even outweighing other values in marriage. This position on the value of children to marriage goes beyond the position that CDF takes, but is held very strongly in many African cultures.

But an opponent could point out other things which the above story exemplifies; namely that childlessness need not be the only reason for divorce, because parents divorce irrespective of children. Nicholas N. Obi articulates several other causes of divorce world-wide as follows:

"... grounds for divorce for different societies, creeds and tongues include: repeated or exaggerated infidelity or extra-marital sexual experience; childlessness or sterility; sexual impotence or unwillingness; habitual drunkenness; desertion...; neglect or failure to support; laziness and economic incapacity; incurable madness; unconfessed prior marriage and imprisonment; quarrelsomeness or continuous nagging; brutality - mental and physical cruelty; sexual incompatibility and frustration; ...uncontrolled jealousy; stealing..." (1987:93).

Although this couple divorced themselves in spite of bearing a child, yet it is this child who is the compelling factor that reunited his parents.

Writing specifically about marriage and procreation in African societies, Mbiti has pointed out that lack of children in a marriage is probably the greatest single cause of divorce "since inability to bear children blocks the stream of life" (1969:145). This implies that although there are other reasons for divorce, childlessness is the most frequent.

What follows may help a foreigner to African or Nigerian culture, to understand the philosophy of marriage in that society and the irreplaceable value which Africans place on bearing their own genetic children. Caldwell and Caldwell saw clearly the irreplaceable role which genetic children play in linking this and the other world, when during their investigation about fertility in Sub-Saharan Africa, they wrote: "We try to substantiate the proposition that the culture, both with regard to this world and the next, has been a seamless whole. The emphasis is on societies molded by stress on ancestry and descent" (Caldwell and Caldwell 1987:410).

There is good reason to believe that the cultural belief in a seamless relationship between this world and the next and the stress on ancestry and descent are paramount concerns in Nigeria. Caldwell and Caldwell have shown by their survey of "*The Cultural Context of High Fertility in Sub-Saharan*" that Africans put no limit to their emphasis on the continuity of heritage. For example:

In a 1973 study of all couples ... in Ibadan City, Nigeria, who had voluntarily limited the size of their families to fewer than six live births, we explored the widespread condemnation by relatives of these innovators. It was found that the most frequent charge against them was that of irresponsibility, in that even families with several surviving children can be quickly wiped out. ... The critics usually claim to know instances of families of four or five children all dying (Caldwell and Caldwell 1987:412).

The underlying reason behind such a criticism is, as the above authors state clearly, the commonplace fear of dying without children. This reason, among other important ones, explains why Nigerians want to bear many children. In the survey referred to above, the authors have this to say with regard to childbearing:

In Nigeria a majority of women with 12 or more live births said that they wanted to continue childbearing. Restricting the analysis to the more meaningful measure of surviving children rather than births, and examining the situation among women with seven or more surviving children (averaging between eight and nine), those stating that they wanted no more amounted to only 33 percent in Kenya, 3 percent in Ghana, 10 percent in Cameroon, and among the Yorubas of Nigeria, surveyed in the Changing African Family Project, non at all (Caldwell and Caldwell 1987:413).

Clearly, here a lineage-based philosophy of human existence significantly affects, a society's attitudes towards procreation. Given this, and the prolific reproductive manner by which Nigerian married couples desire and give birth to children, a barren couple would find it extremely difficult to accept infertility in such a society.

There are then two sets of powerful values that support infertile couples in undertaking IVF/ET: the general value of children to both parents in most marriages and to the race for its continuation, and the more particular value placed by Nigerian and other cultures on children because of their lineage-based view of human life.

The harms of IVF/ET or disadvantages.

In comparison with these positive values of IVF/ET, the single most powerful group of arguments against the technology of IVF/ET as a morally acceptable answer to the agonizing problem of infertility are arguments based on the risks of harm IVF/ET might pose to both mother and fetus. The risks and possible harms include: (1) to the embryo: psychological harm which, it is contended, the child will suffer if he/she knows that he/she is a product of unconventional methods of human reproduction. (2) To the embryo: wastage/death. (3) To the embryo: exposure to the possibility of injury which may result in physical deformity or mental damage to the fetus. (4) To the mother: injury or, the very unlikely, possibly of the death of the mother. (5) To society: various social harms that this artificial means of procreation, might cause by making possible for example, the selection of embryos by sex preference, a practice which in itself, might cause a major imbalance in human population and one which could exacerbate injustices based on gender discrimination.²

For critics of IVF/ET, such harms seem sufficient for them to suggest that the procedure will have serious consequences in the communities in which this reproductive

. This projected harm will not be discussed in this work because it will take us too much afield.

technology is used and so it needs to be prevented or stopped. But before one holds this position, one needs to ask: (1), whether value of children which IVF/ET seeks is, on balance, at least worth any one or all of these projected ills and , (2), whether infertility, which IVF/ET seeks to overcome is worse than any of these harms so that the procedure would be justified by its on balance, better consequences. This harm issue will be returned to again later.

Benefits of a policy supporting IVF/ET

As already said, the single most important and immediate benefit of IVF/ET is the capacity of this technology to enable a childless couple to have their own genetic children. But in addition, it could also lessen the fears and anxieties of unmarried people about the uncertainty of their ability to bear children in their eventual marriages; and it might increase their hope because their chances of bearing children would be greater than without this technology if they turned out to be unable to reproduce children by the ordinary method.

For example, in our hospitals are many young people who are afflicted with diseases such as cancer, the successful treatment of which may cause sterility. Glover et al attest to this fact when they say: "A number of cancers in young people can now be treated by chemotherapy and radiotherapy.

An instance is leukemia in young women. But the treatment makes them sterile, by killing germ cells in the ovary" (1989:104). When such ill-health strikes unmarried young persons in a culture where having children is the basic reasons for marriage, the single persons may lose both the hope of being married and of having children.

But with the availability of egg-freezing and sperm-banking, these young people will increasingly ask for their eggs or sperm to be banked before their treatment, so that they might still have genetic children after (see Glover et al 1989:104). This reproductive technological opportunity would bring with itself, special joy to the hearts of these young, unmarried, and diseased persons. It would also help to protect for them their hopes for marriage and bearing children; this would be more so, in a society where being married and bearing children are two of the life's prides and hopes of marriageable men and women and their parents. These are two values that would be lost to the above identified people in the absence of IVF/ET.

There is also concrete evidence to show that the hopes of the people being talked about are not foundationless. For example, as was shown in Chapter One, over 150,000, children have been born to infertile couples throughout the globe, to infertile couples who without IVF/ET technique, would have still been suffering both the anguish of childlessness and the lack of joy of having genetic offsprings.

But the fact that, in general only about 10 to 15 percent of IVF/ET is successful (Winston and Handyside 1993:936) must be factored into this analysis. Obviously then, a large percentage of sterile couples still cannot be helped by this technology. For example, according to Winston and Handyside, fewer than 5,300 babies were born, following IVF/ET in Great Britain, where there may be as many as 600,000 infertile couples (1993:936).

However, no one can doubt the fact that, 10 to 15 per cent success rate of IVF/ET procedure represents a sizeable reduction in the number of infertile couples among us. It is a benefit to those affected. On the other hand following the major loss, the loss of child-bearing, resulting from infertility, is a host of other evils and human suffering also associated with infertility, which IVF/ET would help to minimize. For example, it would lessens the amount of guilt, shame, anguish, psychological scar, and separation or divorce of spouses which mark the lives of many couples on account of childlessness.

This technology of IVF/ET, would be highly useful to numerous childless couples in Nigeria, where the purpose of marriage is mainly to bear children: (1) It is child bearing, if anything within the context of marriage, that unites husband and wife. (2) It is this fact of (1) that makes marriage worthwhile and attractive to marriageable men and women. (3) It is on the bearing of children, that the

continuation of the human species is possible; for many lines of families have been closed as a result of infertility. (4) The fact of (1) is the precondition for the boon of good social or recreational, economic, political, and religious life. The starting place of these boons of life is in the family. (5) Seen from a Nigerian outlook on marriage, the fullness of marital joy begins to emerge with the birth of a child to spouses.

Again viewed from the perspective of the Nigerian culture, the joy of marriage is only partial and the notion of family partial without a child. For a household is complete only when at least one child is born into that household. In most cases, a household is considered complete only when a male and female child have been born into it. As Onwuejeogwu has written: "It is evident that at an early stage the position of the new family is shaky and may never be formed at all if no children are born" (1975:90).

It is when a child is born that husband and wife begin to enjoy the fullness of the joy of their marriage because they then qualify for the title, parents. In other words, parenthood carries with it a special kind of value and joy which neither marriage nor sexual intercourse with no child/ren, are capable of providing.

As Tola Pearce (1992) has noted, in Nigeria "subfertile women or those in search of sons are under pressure to produce a child of whatever condition." Thus a community

which has a means by which couples unable to have genetic children at all cost, are helped to have children would be more valuable than another community which has nothing at all to help couples in similar or equivalent situation.

In cultures such as Nigeria where children is the supreme benefit and reason for marriage, then, the whole culture is better off with the possibility of IVF/ET than without it since infertility is a major threat to the realization of the most valuable good and by reason of this threat, it becomes in turn a threat to other goods, such as unity between husband and wife and their families. In this way the very institution of marriage as the foundation for human family and society is also in jeopardy if infertile couples have no recourse.

Psychological harm

The opponents of IVF/ET, notably, CDF and others,³ claim that children born of IVF/ET will suffer psychologically or emotionally without specification about the kind of psychological or emotional harm these children will suffer.

For the purposes of this dissertation, this author, will understand "psychological" in one of the three sense designated by *The Random House Dictionary Of The English*

. See, "'Give Me Children or I Shall Die!' New Reproductive Technologies and Harm to Children" by Cynthia B. Cohen, in: *Hastings Center Report*, Vol. 26, No. 2, March - April 1996, p.20.

Language; namely, that which pertains to, or affects the mind "as a function of awareness, feeling, or motivation". This author will also understand "emotion" in three of the five senses the above dictionary defines this term; namely,

"1. an affective state of consciousness in which joy, sorrow, fear, hate, or the like, is experienced, as distinguished from cognitive and volitional states of consciousness. 2. any of the feelings of joy, sorrow, fear hate, love, etc. 3. any strong agitation of the feelings actuated by experiencing love, hate, fear, etc., and usually accompanied by certain physiological changes, ... and often overt manifestation, as crying or shaking."

This author would add: such emotional states or psychological states or reaction as "shame", "guilt", "embarrassment", "worry", "depression", "anger" and others.

The claim that IVF/ET will cause children resulting from them psychological and/or emotional harm seems foundationless. Available evidence on the issue of how an IVF/ET child would feel on his/her knowledge that he/she was conceived by this technological process, indicates otherwise:

Until recently very little has been known about how AID children have fared as they have grown up within their families, and even now the information is based on the experiences of only a small number of individuals. Occasionally, usually in the popular press, one hears of the experience of adults who have become aware of their AID origins and who are disturbed by this knowledge. Often these individuals have found out about their origins accidentally or in a hurtful way during a

family quarrel. It may be significant that the young people contracted in the Exeter project had all been told in a purposeful and planned way. These young adults had accepted their AID status equably and none of them had found it a particularly traumatic experience. They had certainly been surprised when they were told, but some of that surprise was because their parents had kept the matter such a close secret for so many years. None of them regretted the fact that they had been conceived by AID. They were enjoying life and happy to be alive and realized that they owed their existence to AID. They were also pleased to feel that their parents had wanted a child so badly, and that they were that child who had fulfilled their parents' wishes. One said, '...the realization that I had been brought into the world, you know, they actually went to tremendous lengths because they wanted to have a baby. And I suddenly felt that they must love me a tremendous amount, that I was very important to them' (David R. Bromham et al 1990:82; emphasis mine).

The citation above indicates that the available empirical evidence goes against the opponents of IVF/ET. It is not hard to imagine why; namely that the children of this technology would have stronger reason to be happy that they are alive and that they owe their existence to IVF/ET. That is, these children would have nothing to be embarrassed about or ashamed of since they have genetic affinity with both of their parents (this dissertation is focused on homologous IVF/ET) and for the reasons already given.

But this evidence is not to deny entirely that some of the children of IVF/ET might be negatively psychologically affected. For as the first six lines of emphasis show in the block quotation above, some of the adults of IVF/ET (AID), have been quite disturbed by the knowledge of their origin.

But we need to consider also the reason and circumstances for their disturbance. We are told that part of the reasons for their disturbance is the manner through which they gained knowledge of their origin, namely "accidentally or in a hurtful way during a family quarrel".

The real issue with these people, might well be, not that they were conceive by IVF/ET, but rather the way in which they gained this knowledge. Moreover, even if one should grant that they were more disturbed by the fact of the origin of their conception than by the manner through which they learned about their origin, it may still be that the fact of their very existence matters more to them than the process of their conception. In other words, even if there is some comparative psychological loss, still most if not all when everything in their life is considered, would prefer that they were conceived than not conceived.

A second group among these person were told of their origin "in a purposeful and planned way" but still found it psychologically painful. Although this group was surprised when they were told about the manner of their conception, part of that surprise was not so much that they disvalued being conceived by the means in question, as it was their disvalue of the fact that "their parents had kept the matter such a close secret for so many years." But even at their expressed dislike, "none of them had found it a particularly traumatic experience" to be conceived by IVF/ET. Instead,

everything considered, they "were enjoying life and happy to be alive..."

In addition, to return to earlier theme, these young people realized how much having children meant to their parents; for we are told that "They were also pleased to feel that their parents had wanted a child so badly, and that they were that child who had fulfilled their parents' wishes."

Such evidence, indicates that the children conceived by IVF/ET, do not suffer a disproportionately greater psychological trauma, upon their learning of the process of their birth, than is normal in healthy children born through traditional means of conception. Any difference in psychological reaction is surely not sufficient to warrant condemning IVF/ET on the basis of a projected psychological loss and/or emotional harm. If anything, it is the behavior of their parents in revealing the methods of birth in improper ways, or when revealing them in proper ways, still keeping them too long as a secret before revealing them, that seem to create some psychological feelings in the children, not the actual means of conception. But this behavior of the parents, even if it should be attended to, tells us nothing about the morality of IVF/ET.

Clearly, in order to avoid or lessen this apparent psychological ill feeling, parents of IVF/ET children should start early enough to educate the children about the process

of their conception. This means that the role of parents in this matter is as important to maintain a good psychological balance in the children, as it is important for the parents to fulfill their natural desire to have children. Society's role in this matter about educating the parents of IVF/ET children is also clearly important.

Admittedly, the evidence about psychological harm from IVF/ET given above is on AID children. But the above analysis provides strong basis for us to claim that IVF/ET (AIH) would at the very least fare as well as the IVF/ET (AID). What was assumed because of the very concept of IVF/ET-AID is that the children were also told that either the egg or the sperm, or both which form the living adult human being, came from another person/s; in which case the reaction of the IVF/ET AID persons, was not only about the fact that they were conceived by an extraordinary method (so-called artificial means), but also that their present parents are not necessarily their biological parents. As was shown above neither of the two issues mattered so much to them as to be overly psychologically affected. By comparison with IVF/ET (AIH), the biological consideration of their origin, is excluded from our discussion; so that only the one fact of being conceived in the so-called artificial way could constitute psychological problem or feeling, if any.

It seems much more unlikely that IVF/ET (AIH) children could develop a disproportionately negative psychological

feeling about life in general, on their knowledge of only the means of their conception, than the children of IVF/ET (AID) could develop about life in general on their knowledge of both the means itself and the biological issue; such that they would have preferred not being alive through that means than being alive through it.

The point was made above that such children would naturally prefer to have been born rather than not. But is it better to be born or not to be born? Some critics⁴ could say that being happy that one is born and alive depends on the kind of life one is experiencing. They could reason that if one is experiencing a life of tremendous pain and suffering such that one questioned why he/she was born in the first place; that is if one is experiencing a life of pain and suffering sufficient for one to wish to die rather than to live, then it would be more likely that one would have preferred not to have been born at all. But if one is enjoying life as it is, in its ups and downs, in one's given situation such that one is unwilling to die, then one could say that it is better to have been born than not at all.

However, against the above argument, it could be claimed that one who lives a regrettable life of pain and misery such that one prefers death to life would only be possible where one has had an experience of a better life

. See author, footnote 9.

before. For it could be possible that if the life of pain and misery is the only kind of life one ever knew, one would have no reason to wish to die because one would have no better life to compare with. There is in other words a value to such a person's life that even his/her pains cannot counter. So few if any persons can consistently hold that it would truly have been better not to have been born. As has been shown, however, few children, if any, conceived by IVF/ET would take this view anyway.

Therefore these criticisms do not appear to be plausible reasons to convince a married couple against their wish to have their own children just like other couples because, life of pain and misery in general, life of pain and misery due to serious physical deformity in particular as projected will happen to children of IVF/ET, will not be the exclusive preserve of those children, for such lives are already among us (though we need not intentionally create more; and not IVF/ET intentionally does). Therefore those who oppose IVF/ET on the basis of excessive psychological harm to the children of IVF/ET have not made a strong enough case. Robertson words the idea fittingly: "Preventing harm would mean preventing birth of the child whose interests one is trying to protect. Yet the child's interests are hardly protected by preventing the child's existence" (1994:75).

Another way to make this point is to say that this set of arguments against IVF/ET is too narrowly focused on the

risk of harm. The good intent to eliminate as much harm as possible does not have room within it for an, equivalent intent to produce as much good as possible for all the parties involved.

Another possible harm from IVF/ET: death of embryo

Some scenarios of disvalue to many married couples who absolutely desire to have children are the loss of embryonic lives, mostly through the mishaps of ectopic (also called extrauterine) pregnancies or through miscarriages (also called spontaneous abortions). "An extrauterine pregnancy is one in which a fertilized ovum implants in an area other than the uterine cavity" (Martin L. Pernoll, and Sara H. Garmel 1994:314); while "spontaneous abortion is ... a pregnancy terminating before the 20th completed week (139 days) of gestation" (Pernoll and Garmel 1994:306).

It has been noted already that according to Aquinas, from the moral viewpoint, an act is good "only when the exterior action is proportioned to the end according to reason, when there is no contradiction of the means and the end in the whole of the act on the level of reason." Also, it has been observed that because of his/her limitations, the human person cannot always realize his/her possibilities; and so in his/her ambiguity sometimes ontic evil is experienced in an attempt to do morally good acts. The question throughout this chapter is the question of

proportionality. Is the benefit of children equal to or greater than the harm of IVF/ET?

Most people would agree that ectopic pregnancy and miscarriage are physical evils. Statistics show that these conditions are very common throughout the world. In Europe for example, extrauterine pregnancies "occur about once in every 150 pregnancies. Elsewhere they are more common: in Jamaica they occur once in every 20 pregnancies, and they are even more common in parts of Africa" (Glover et al 1989:104). It is estimated that miscarriages in the United Kingdom alone, "are about 100,000 hospital admissions a year" (Glover et al 1989:104). In the United States of America, "about 1 in every 5 pregnancies end in miscarriage" (Janet S. Peterman 1988:21).

The harms that are associated with these pregnancy conditions are very grave. For example, (i) they cause infertility, sterility, or childlessness among numerous married couples (Glover et al:104; Martin L. Pernoll and Sara H. Garmel (1994:319). (ii) The loss of the lives of many embryos are blamed on the ectopic pregnancies and miscarriages (see Yvonne Brown 1992:82; Pernoll and Garmel 1994:320). (iii) Sometimes the loss of the lives of both the fetus and its mother are blamed on them (see Glover et al 1989:104; Pernoll and Garmel 1994:320). In general "about 1

in 1000 ectopic pregnancies result in maternal death"
 (Pernoll and Garmel 1994:318)⁵

A careful study of the harms associated with ectopic pregnancy condition therefore is necessary here and could go some length in helping to determine whether one should support the arguments for IVF/ET or whether one should support those against the use of this procedure. Let us now examine the examples above accordingly.

(i) Ectopic pregnancies cause infertility, sterility, or childlessness among numerous married couples. The first case against ectopic pregnancy is that it causes infertility - "infertility is present in about 60% (Pernoll, and Garmel 1994:320). Statistics show that 10 to 20% of women who have had ectopic pregnancy the first time, will have it a second time; and 4-5% of the second time occurrence, "will occur in the opposite tube" (Pernoll and Garmel 1994:314). According to Pernoll and Garmel, the normal treatment for this percentage of suffering women is "total tubal excision" (Pernoll and Garmel 1994:320). This is not to say that the 4-5% represents all the women who will remain sterile without special intervention. It simply means that 4-5% of all women affected by second time occurrence of ectopic

. Spontaneous abortion (miscarriage) will not be examined here because all the major causes of miscarriage which can be helped by ivf/et involves a is miscarriage which arises from a "Genetic error" and therefore which must be instances of AID, not AIH which is the topic of study. See "Early Pregnancy Risks" by Martin L. Pernoll, MD, & Sara H. Garmel, MD, in *Current:Obstetric & Gynecologic Diagnosis & Treatment*, eds. Alan H. DeCherney, MD, and Martin L. Pernoll, MD. Appleton & Lange, 25 Van Zant Street, East Norwalk, Connecticut, U.S.A., p.312, 1994.

pregnancy will have their two reproductive tubes cut off. This means that the only alternative left is IVF/ET, since as has been shown already other alternatives are not as beneficial as IVF/ET. The ethics committee of the American Fertility Society lends credence to this as follows:

The most common indication for the use of human IVF procedures is irreconcilable tubal damage or destruction, which exists in patients who have undergone surgical removal of the fallopian tubes because of inflammatory disease or tubal ectopic pregnancy (1986:32S).

By being the cause of sterility, ectopic pregnancy adds to the existing sources childlessness. This situation is not helped by the fact that in "the past 5 years, the incidence of tubal ectopic pregnancy has increased more than 50% owing to the following factors: epidemic salpingitis; microscopic tubal surgery of all kinds ..." (Pernoll and Garmel 1994:320). The growing pain about this upsurge, is that, this rise, is bound to increase the number of women suffering childlessness due to some form of ectopic pregnancy.

However, there is evidence that IVF/ET themselves can sometimes cause ectopic pregnancy. For example, Pernoll and Garmel include "in vitro fertilization and embryo transfer" (1994:315) among other factors that can cause ectopic

pregnancy. This is to say that IVF/ET can be part of or add to the problem it attempts to solve.

But history shows that IVF/ET (excluding artificial insemination)⁶ as we have it, today did not come into being until July of 1978 when its first product was born. The rate of occurrence of extrauterine pregnancy had tripled for many years prior to the first IVF/ET baby, and just two years after the baby's birth. Pernoll and Garmel attest to this fact when they say that ectopic pregnancy "rate increased from 4.8 in 1000 term births in 1970 to 14.5 in 1000 in 1980..." (Pernoll and Garmell 1994:314). This means that the rapid increase in the occurrence of ectopic pregnancy is not necessarily due to IVF/ET, even though it is contributive to the increase in recent times.

An opponent might still contend that two years (from 1978-1980) aggressive IVF/ET practice can significantly influence the rate of increase in the number of extrauterine pregnancies over the years antecedent to this technical reproductive procedure. This view would be mistaken if one considers that IVF/ET is not mentioned (though its sister method, artificial insemination is) among the kind of

. Artificial insemination (AI) as a method of human conception has been in use for more than two centuries. Two physicians, John Hunter (1728-1793) of England, and Thouret of France are said to be the first in the successful application of this method on human beings. Cf. John C. Wakefield, *Artifical Childmaking: Articial Insemination In Catholic Teaching*, Pope John XXIII Medical-Moral Research and Education Center. St. Louis, Missouri, 1978, pp. 18-19. This method "has been widely used as a method to fight infertility in humans since about 1950" (Richard Westley *Guidlines For Contemporary Catholics: Life, Death and Science*, The Thomas More Press Chicago, Illinois, 1989, p. 84).

factors that have augmented the rate of the occurrence of this lethal condition when one of the most recent surveys were conducted. Pernoll and Garmel report:

In the past 5 years, the incidence of tubal ectopic pregnancy has increased more than 50% owing to the following factors: epidemic salpingitis; microscopic tubal surgery of all kinds; conservative management of the tube with preservation of an organ that still retains the causative factor; the timing of artificial insemination and natural methods of contraception, which lead to fertilization of a late ovum; an increased number of tubal ligations with increased failures; and DES syndrome (1994:320).

Thus artificial insemination as a disvalue in the sense that it can cause ectopic pregnancy, is inconsequential in that it can be more readily controlled by a more accurate timing of ovulation, a claim that cannot be made for classical causes of ectopic pregnancy. Classical causes of ectopic pregnancy include "tubal factors" which are responsible for about "50% of excised tubal pregnancies" (Pernoll and Garmel 1994:315); "zygote abnormalities... including chromosomal abnormalities, gross malformation, and neutral tube defects ... abnormal sperm counts or a high incidence of abnormal spermatozoa. ...Ovarian factor, Exogenous Hormones" factors (Pernoll and Garmel 1994:315).

Granted then that the assisted methods of human reproduction can sometimes cause the problem it seeks to alleviate still the nature of the technology or insemination is such that it can sometimes redress its own errors, as

well as those of other factors of infertility by producing the value that was originally sought after. Aquinas urges us to focus on the human agents (married couple) who seek a child on one hand and the human agents (the medical team) who are assisting the couple are all involved the procedural acts of IVF/ET or artificial insemination on the other. Understandably, the possibility of the ontic evil of ectopic pregnancy can arise here. But when these agents consider the value of their end and the overall good, and what that value means to them, especially the infertile couple, they must weigh these values (particular and common or general good) against the disvalues of the couples's not having a child at all, it is not surprizing that they judge the risks involved in the procedure are worth taking. The value of the ectopic embryo's short life, its possibility to become a child is more valuable than if it had no life at all.

Moreover, their valuing and planning to achieve their good end/s (particular and whole good end), through this means of IVF/ET, involves at the same time plans to eliminate or at the very least to lessen whatever harm/disvalue might frustrate their end/s. In this way all things considered, IVF/ET and artificial insemination remains a valuable means chosen by human agents to achieve the desired good end even though some disvalue (ontic evil) might be encountered. In other words, the total picture

about all relevant factors in the entire project makes good sense. The number of successful IVF/ET procedures, cited earlier in this work are in support of their judgments.

(ii) The loss of the lives of many embryos are blamed on the ectopic pregnancies and miscarriages. Many arguments against IVF/ET have narrowly focused on various harms the procedure holds for the embryo, to a seeming neglect of the harms the embryo's parents suffer, especially its mother. The seriousness of the risks of harm involved in ectopic pregnancies may be suggested by the fact that "maternal mortality rate due to ectopic pregnancy in the USA is 1-2%; the prenatal mortality rate is virtually 100% (Pernoll and Garmel 1994:320). The virtual 100% death rate of the embryos raises an understandable alarm about the enormity of ectopic pregnancy; at the same time, it can easily mask the prolonged suffering of the parents, especially the mother who undergoes the physical pains and injuries that are involved.

Still in view of the fact that virtually 100% of the fetuses die in an ectopic pregnancy, it is arguable whether the suffering of the fetus is sufficiently harmful to it that is a more serious disvalue than the suffering of its infertile parents and the positive value of a possible child. If it is true (as human experience shows), that an injury or harm that befalls a child/person especially one involving death, can have a negative emotional or

psychological affect on his/her parents and vice versa, then an important question also arises with regard to the suffering of the human embryos that are lost in ectopic pregnancies in relation to their parents. So we must ask whether death is really a harm as such to the embryos, since they do not have real awareness of their own death (not meaning that they do not feel pain), and we must look at the suffering of their parents who learn of their death and suffer accordingly.

For most people, death is a harm because of the fear of various kinds of pains and sufferings associated with some illnesses that cause death; fear and anxiety about the uncertainties of the outcome of the injuries or sickness they are exposed to; fear of the unknown or anxiety about the uncertainty of one's spiritual status hereafter; sorrow or guilt felt for not accomplishing some important sets of personal, cultural, social, or religious values they are committed to; but not necessarily because of death itself; so that death can actually be harmful if such fears of it causes tremendous psychological harm to the person.

This is not to deny that there are people who are afraid of death itself. It must be acknowledged though, that this fear issue, does not remove the pain and suffering which embryos/fetuses of certain age feel. However, it seems true to say that even at this, the infertile couple remain more wounded emotionally on long term basis, especially the

woman who bears the entire brunt of the physical pains involved with resolving an incidence of ectopic pregnancy and the tremendous harmful anxieties of her spouse, families members and others experience within the period. For most infertile couples, this kind of harm lingers until death.

It is also true that in real life situation, that although the death of an expectant child brings sorrow to its immediate family members, and the larger community, the birth of another child by that couple minimizes the pain and sorrow caused by the dying of the former child. This is not to claim that the birth of this child eliminates the entire experience relevant to the loss of the dead child; nor is this to claim that the dead child was less human than the living child. If the above is true of *in vivo* births, there seems no reason why it should not be true of *in vitro* children.

For in a pronatalistic society such as Nigeria where to bear one's own genetic child, is the human-rock-foundation for the pride, and happiness of married couple, the bearing of a child is still cherished more than the many more children that never saw the light of day; though their deaths are very much grieved by all in the community. Nonetheless, the joy which this one child brings to the infertile couple and the members of the society is sufficient to compensate the loss of many embryos and the social stigma of infertility. The following may give a

foreigner an inkling into the kind of joy and rejoicing that accompanies the birth of a child to a couple that have long experienced the sadness and stigma of sterility: "As a rule, the whole occasion of birth is marked with feasting and great rejoicing among the relatives and neighbors of the parents concerned" (Mbiti 1969:114).

Can one still claim, in view of the above that embryos suffer more serious disvalue in the loss of their lives than their parents who are infertile or who become aware of their loss of the fetuses and aware of their own emotional or psychological trauma? It seems to this author that the immediate suffering of the infertile couples which the loss of a cherished value (child) and the long term emotional or psychological hurt that infertility brings to bear on them may justly tip the scale in favor of giving an embryo a chance at life, even at the risk of ectopic (or other circumstance) of early death.

But even when the kind of disvalue examined above is ameliorated, one of the most serious ethical objections to IVF/ET reproductive technique may not necessarily be resolved. That objection is that either defective or "spare or unimplanted embryos" may be used for scientific experimental purposes and finally destroyed as one author clearly points out: "Many ova are fertilized, the 'spare' ones are either immediately destroyed, used for scientific research, or frozen for future implantation or

experimentation and ultimately destruction" (Westley 1989:88). The experimentation the unimplanted embryos will be subjected to, is to achieve other purposes which these medical scientists claim might, be beneficial to humanity.

On this issue, the opponent's attention is called, not to confuse the creation of embryos for laboratory goals, with, creating embryos solely for implantation into its own mother's womb for further development. This means that, in this specific instance, the intention or primary goal of those involved in IVF/ET is specifically to assist infertile couples to conceive a child. Admittedly, sometimes, the physiological, hormonal, or chromosomal condition of a couple may necessarily result in the creation of abnormal embryos that would not be viable enough to implant in a woman's womb. In this case the embryo should be permitted to die without being implanted since its fate will be the same in either case, but the implanting of a known severely defective embryo would involve an almost certain loss and some risk of physical harm to the mother.

But the issue of what to do with spare embryos which are alive and not implanted lingers on. Two major avenues to remedy the situation have been suggested: the first is that the number of embryos created should not exceed the number that can actually be implanted in a woman (Smith 1990:33); the second is that if more embryos than are needed are

fertilized, then as some authors⁷ have suggested, they ought to be frozen for future implantations. It is more probable and than not that an infertile couple who desires a child would prefer to have their excess embryos, safely preserved, than that they would prefer to have them destroyed. Others have even suggested they "should be treated as a person" on the basis of a *prima facie* obligation only" (Richard A. McCormick 1991:13).⁸

IVF/ET and harm of deformity to embryo

Another consideration of possible harm is that embryos even if IVF/ET is successful, and the implanted embryo is born alive but deformed what moral reasons could justify the IVF/ET that brought it to life?

The real issue about this question, is not necessarily that the child is deformed, as it is that the child will suffer because he/she is deformed. The worst scenario one can envision would be a situation where a child is severely deformed. How does one balance the severity of sufferings arising from such a deformity possibly as a consequence of

. "The Case Against Thawing Unused Frozen Embryos" by David T. Ozar, in: *Hastings Center Report*, August 1985, pp. 7-12. ; *What We May Do with Preembryos: A Response to Richard A. McCormick* by John A. Robertson, in: *Kennedy Institute of Ethics Journal*, Vol. 1, No. 4, Dec. 1991; Also "Resolving Disputes Over Frozen Embryos", by John A. Robertson, in: *Hastings Center Report*, Nov./Dec. 1989, pp. 7-12.

. "Who or What is the Embryo?" by Richard A. McCormick, in: *Kennedy Institute of Ethics Journal*, Vol. 1, No. 1, March 1991.

IVF/ET procedures themselves with the fact that such children are the products of IVF/ET which is undertaken to alleviate sufferings due to infertility?

In one kind of case of possible deformity the infertile couple together with the medical team know that they have a significant risk of fertilizing a deformed baby. This risk is nevertheless still less than a 100% chance of having no children without IVF/ET. This means that the chance of risk they are taking is worth taking because, the value being pursued (having a child/the life of a child) is worth a lot more than the risk. Although there may be some exceptions in the case of severely painful deformities that would prevent a child from experiencing parents' loving care in general - by an argument analogous to the one offered above in discussing psychological harm - it seems reasonable to hold that to be born deformed is better not to be born at all. This is to say that in the vast majority of cases, the risk and procedure, are commensurate or in due proportion to the value at stake (child), especially as there is no better option available.

What is important is, how suffering is looked at in the face of one's value systems. The following story may be apt to help analyze the moral issue involved. A father narrated his experience about a genetically inherited, and progressive disease, called "Fibrodysplasia Ossificans

Progressiva (FOP)", which his daughter, named Sarah, suffers from. The rest of the story reads:

In Sarah's case it appears to be progressing faster than expected. She is now seven and half years old. Her jaws open only a centimeter and she has a crossbite. Her neck, shoulders and spine are rigid. She can read and write and feed herself but cannot dress or bathe herself. She has trouble sitting in most chairs and increasingly is confined to a wheelchair, one custom-made for her rigid, contorted body. Her cognitive, social and fine motor skills range from average to superior, but her gross motor and daily living skills are drastically sub-normal. She wears hearing aids because the bones of the inner ear have fused (Steele 1994:2).

Sometime our imaginations about another person's pain, or happiness are not accurate. Our first hearing of Sarah's physical condition might chill our feelings because, being in good physical health, we project how we might feel if we were in Sarah's condition, to how Sarah actually feels. So we draw the conclusion that she is suffering terribly. But the fact may well be that Sarah, is not actually feeling as we imagine and feel about her. In that case what we rightly call a disvalue (Sarah' suffering) can be blown out of proportion because our senses or imaginations deceive us or because we are unable to put the disvalue (Sarah's suffering) into proper perspective. But when we put it into correct perspective, taking account of the human subject who is directly involved in the suffering, then our value judgment or perspective may also change.

Sarah's father, makes the point clear when he states that Sarah views her condition as narrated above differently from the observer. "It may well be that this absurdity is felt less by the disabled themselves than by their families" (Steele 1994:2). Sarah's father illustrates his point:

Recently one of Sarah's friends tried to hold her arms locked like Sarah's arms. She did this with the evident intention to understand, not to mock. After a few moments she gave up in frustration. Sarah, wise beyond her years, said, "I'm used to it and she's not because I've never known anything else" (Steele 1994:2).

The point therefore, is that, it is not necessarily true that babies who may be born severely deformed through IVF/ET process will actually suffer to the degree that we imagine the suffering ourselves especially if they are deeply loved and related to. And it remains true of course that their state of life is not anything less than that of a human being who must be valued and loved. This is not to deny that they will experience sufferings, nor to deny that their physical conditions may cause them limitations.

So to argue as has been done here is not to hold the view that IVF/ET is trouble free. But then, like the assisted reproductive technology of IVF/ET the ordinary method of human reproduction carries with it a range of the dangers and harms. The proper question is to weigh these against the values to be gained.

Other kinds of deformity not associated directly with hereditary or genetic diseases, which may be attributable to IVF/ET, can now be examined. It is possible that IVF/ET can produce some children who will suffer serious deformity because of problems with IVF/ET procedure itself. According to Cynthia B. Cohen, data from Australia provide evidence of some severe abnormalities attributed to IVF/ET. According to the data, children born of IVF/ET

"are two or three times more likely to suffer such serious diseases as spina bifida and transposition of the great vessels (a heart abnormality). The Australian data also suggest that some drugs used to stimulate women's ovaries to produce multiple oocytes in preparation for IVF increase the risk of serious birth impairments in the resulting children (1996:20).

However, even critics of IVF/ET such as Kass claim that up to 1985 no report of any severe abnormalities arising from IVF/ET was made. Other studies seem to support Kass' claim. For example, Cohen, in citing a conflicting evidence with the Australian study, notes that:

"other reports, however, suggest that there is no increase in disorders at birth among children resulting from the use of the new reproductive technologies. One small American follow-up study of the health status of children born of IVF and gamete intrafallopian transfer (GIFT) could find no significant differences in the rate of physical or neurological abnormalities in children born of techniques of assisted conception (1996:20).

But one cannot write off the Australian claim without due consideration, because of the ever present possibility of error in any human action. When that possibility is taken seriously, it becomes credible that serious mental⁹ or physical deformity, by IVF/ET is possible. However, the probability of deformed children being produced by IVF/ET, is even less today than it was in the early days of the technology, because the procedure has undergone so much improvement. This means that infertile couples who are sterile have lesser chances of bearing deformed babies by IVF/ET (barring hereditary or genetic diseases which might cause deformity), than they had twenty years ago when the technology came into practical effect. In other words this form of disvalue of the procedure is in decline and from the available evidence has never been very great.

As was mentioned earlier, some authors are of the view that IVF/ET would not necessarily be immoral even if it produces children with serious physical deformity, because to be alive and deformed is better than not being alive at all. For example, a certain author says that:

. Mental or psychological and emotional harm will be examined separately below.

[A] higher incidence of birth defects in such [IVF/ET] offspring would not justify banning the technique in order to protect the offspring, because without these techniques these children would not have been born at all. Unless their lives are so full of suffering as to be worse than no life at all, a very unlikely supposition, the defective children of such a union have not been harmed if they would not have been born healthy (John A. Robertson 1988:434; square bracket mine).¹⁰

But the arguments above are not all. The rate at which embryos' lives are lost in IVF/ET raises legitimate moral concern. Yes, it is true that the rate at which embryonic lives are lost through IVF/ET, is important to merit serious consideration when pursuing a view point that, is representative of the new form of human reproduction. But, it ought also to be said, without being polemical, that similar loss of lives are not only not absent in the ordinary method of human reproduction, but indeed are more frequent in their occurrences as the statistics (2/3 of all pregnancies) given earlier makes no effort to conceal. These are ontic evils that must be evaluated in comparison with the values to be achieved.

It is the responsibility of humanity, especially those who have the skill and knowledge, to lessen or prevent as much as possible such ontic evils especially as they frustrate some of the primary goals (bearing children) of the procedure. Not trying to prevent or lessen this ontic

. Quotation cited by Cynthia Cohen in *Hastings Center Report* Vol. 26, No. 2, March-April 1996, p. 21.

evil, would itself be a moral evil in so far as a person has the know-how to lessen or prevent some of it. If someone willfully fails to do so, knowing this evil to be a serious evil that frustrates the well-being of some members of society and therefore the development of humanity that would be a serious moral wrong.

This responsibility to act is even more demanded of us because knowledge as a resource, is itself a good, to promote other good or even higher good (in our case human life). It seems compelling that we should prevent or lessen these ontic evils since the promotion of the good we seek will not cause more ontic evil than already occurs in ordinary method of human reproduction. Such consideration with those presented earlier, point to the conclusion that all things considered, IVF/ET is not a disproportionate means of achieving the rational person's goal of human conception, given the gravity of suffering of infertile couples, the value of, and need for children.

IVF/ET and possible harm to the embryo's mother

It is possible that the life of the mother could be at risk because of an ectopic pregnancy as a result of IVF/ET. The issue is one of a vexing moral conflict between two human lives, that is, risk to the mother's life for the sake of the possible life of a child who might be born. As JoAnn V. Pinkerton, and James J. Finnerty, note, the fact is "This

is not a choice between absolute good and evil but an attempt to balance two competing interests, both of which pose nearly equal moral worth" (1996:292).

But nearly equal is not the same as equal. For example, in cases of ethical dilemmas involving embryonic-maternal life conflicts in Nigeria, society grieves the death of the woman more than it does over the death of the conceptus. This is to say that the life of a mother, all things considered, is relatively more valuable than that of the conceptus. Several reasons can account for the more sorrowing for the mother whose death is considered more grievous than that of the fetus.

(1) The mother is a fully developed, actual person, while the embryo is not considered a person yet though it has the possibility to reach the status of a person. (2) The mother occupies and excises actual and functional, political, religious, economic position in the society; this means that she does something meaningful and visible for society. The fetus does not yet have such a place or responsibility in society, though it has the potential. (3) There is a special bond, for instance, the bond of friendship, between the mother and the members of the society which establishes a personal affect in the members of this society on account of the mother's death. There is no such relationship and interaction yet between the embryo and any members of the human society except the limited

interaction between the mother (and possibly father) and the fetus.

These arguments do not suggest that the dead fetus is not recognized as valuable or as an actual human being; As a matter of fact Nigerians recognize pregnancy as "the first indication that a new member of society is on the way" (Mbiti 1969:110). But this recognition of the fetus as a prospective full member of the human society, does not of itself bring it to the status of a social person, a status which only members of society can confer on it. Mbiti explains:

In African societies, the birth of a child is a process which begins long before the child's arrival in this world and continues long thereafter. It is not just a single event which can be recorded on a particular date. Nature brings the child into the world, but society creates the child into a social being, a corporate person. For it is the community which must protect the child, feed it, bring it up, educate it and in many other ways incorporate it into the wider community. Children are the buds of society, and every birth is the arrival of 'spring' when life shoots out and the community thrives. The birth of a child is, therefore, the concern not only of the parents but of many relatives including the living and the departed. Kinship plays an important role here, so that a child cannot be exclusively 'my child' but only 'our child' (1969:110).

As Mbiti helps to clarify, what is grieved in the death of a mother, that is different from that of the death of a fetus, is the corporate personality of the woman which society has helped to create her into right from the moment

of her birth; that is, all that it has helped her to become culturally. Every child is created into the corporate culture of his or her sex. (The corporate personhood that society will create a woman into in Nigeria, is different from that of a man, without discriminating of their equality as human beings/persons).

The gravity of the loss of the mother of the fetus is known by such verbal expressions as: "Who is going to take care of the younger ones? (where the woman is known to have children needing motherly care and protection); or "she could have had another chance to bear a child" (where the woman has no child yet). The later of these utterances, it could be argued by those who believe that a fetus is a person, carries little or no weight at all because the mother is no more valuable than the fetus, for two of them are equally human beings, with their individual possibilities. Thus they could then contend that, the fetus could have as much chances as the mother if it had survived, to bear its own children and then keep open the line of progeny.

These objections do not seem to counteract the view that both mother and fetus are human beings equally valuable as such. What it seems to fail to consider is the social factor in creating who we are as social persons, a social personality that a fetus so far lacks. As a consequence, if the risk of ectopic pregnancy meant serious risk of death to

the mother, that would be a serious argument against IVF/ET. But there is very little evidence of such risk. It is a legitimate question to pose, but there is so little risk that it is not a reason to reject IVF/ET.

Conclusion

The consequentialist arguments against IVF/ET have been examined and found wanting because the general risk of harm to embryo, child, and mother are outweighed, often greatly outweighed by the direct and indirect values achievable by IVF/ET.

This chapter has noted that from the start, the destruction, or wastage of human embryos has been one of the vexing criteria for the opponents of IVF/ET to judge it as immoral. The outcome of the analysis of available evidence about psychological harm which children of IVF/ET would suffer, does not support the claims of the opponents. Children conceived by IVF/ET are happy that they were born to their parents.

The analysis of available facts about the number of embryos lost through ordinary method of human conception, when compared with those lost through IVF/ET are far more than the amount of embryos lost during IVF/ET; given the fact that there are by far more fertile women in the world who loose embryos through ectopic pregnancy than there are of the number of infertile women who lose embryos through

IVF/ET. Also given the overall value of children and the disvalue which childlessness cause couples and society, the risk of the action - bearing children and causing some harm outweigh the risk of inaction - not causing harm and therefore not having any children at all. In addition, the birth of even one child successfully by IVF/ET means a lot more than the dead ones because the live birth removes the otherwise horrible stigma of sterility, and minimizes the pain and suffering which the mother undergoes on account of the dead embryos.

The back bone of the arguments of the opponents lose their strength when measured against more evil consequences of not having this technology as has been demonstrated in this section. It therefore seems to this author that the various above benefits far outweighs their opposing harms, all things considered, to justify morally the technology of IVF/ET for the benefit of infertile couples and society at large. The introduction of this technology is urgently needed in Nigeria, where infertility as against other factors is the main cause for the separation of husband and wife, and is the source of enormous emotional pain to couples and society at large.

CHAPTER FIVE

A CONSEQUENTIALIST EXAMINATION OF PROPOSED ALTERNATIVES TO IVF/ET.

Consequentialist, or proportionalist, arguments are always comparative between alternative courses of action. The previous chapter examined the benefits and possible harms of IVF/ET. The main proposed alternatives to IVF/ET will be examined here. The analysis will show that IVF/ET is generally a better course of action than the alternatives proposed by CDF and others. The chapter shall give a careful and detailed analysis of the pros and cons of each alternative to IVF/ET. In this connection, (a) "adoption", (b) "surgical reconstruction of the oviduct", (c) "acceptance of childlessness together with the development of other avenues towards leading a worthwhile fulfilling life", and (d), "polygamy" are the alternatives to be examined. Obviously, the last alternative is not one proposed by CDF; but it is a recourse traditionally taken in Nigeria and therefore needs to be examined as well.

The thesis of this chapter is that a strong consequentialist justification for policies supporting IVF/ET instead of its rival policies can be made. The

chapter will try to show that in general IVF/ET will produce greater amount of values and lesser amount of disvalues than any of its competing alternatives. This implies that its thesis demands a careful analysis of the benefits and harms of each rival alternatives. Such an analysis must neither ignore how much the means (IVF/ET and its competing alternatives) and end (genetic child) which IVF/ET and the rival alternatives seek, are valued by those who seek them. Since the advantages and disadvantages of IVF/ET have already been addressed in the previous chapter, it is now left to examine its competing alternatives.

Alternatives to IVF/ET

(a) Adoption

Adoption has been proposed as a way of meeting the desires of infertile couples to have children and therefore as a way to avoid the possible harms posed by IVF/ET. In addition to that, some infertile couples may satisfy their desires to have children by adopting other people's babies. For instance, Uniacke says: "Legal adoption of a normal infant, which in most cases would not be the biological child of either partner, is an alternative which many couples on the IVF program say they would welcome" (1988:143).

The basic negative of this proposal is that the desire of infertile couples to have children is ordinarily not

simply a desire to have child/ren, but a desire to have their own genetic children. So adoption of another person's child does not respond to the desire for a child of one's own blood and the deep, sense of lack and incompleteness attending this desire especially in cultures like Nigeria. Besides, adoption has its own problems. Therefore a conflict of values arises in choosing between the use of adoption and IVF/ET to alleviate the problem of infertility suffered by married couples.

Given this conflict, what justification is offered for adoption as a more preferable policy than IVF/ET, with regard to the needs and desires of infertile couples? How can we morally assess the comparative values of the adoptive system and IVF/ET? These questions can be answered by comparing the advantages and disadvantages of adoption to the people affected by infertility with those of IVF/ET done in the previous chapter.

The advantages of adoption

One of the advantages of adoption is that it can provide permanent home to abandoned children, who otherwise would have no family they could call their own. Orphans would benefit immensely from adoption for it would certainly be better to be adopted than to remain in a foster home without parents. There are also some children who, were it not for support of a policy of adoption, would have been

aborted by their mothers for one reason or another. Those children have life because adoption has been supported in general. The biological parents of these children are also spared of the moral guilt which the aborting of the children would have caused them (for those who find abortion morally objectionable). There are still some other children who would have suffered immensely in various ways because of economic adversities of their genetic parents; or would have been victims of some sort of social problems; but who now find adoption as the best thing that could ever have happened to them. The following could be illuminating: "an eighteen-year-old located her birth-mother and learned that all those she is genetically related to - mother, father, and siblings - are alcoholics and drug addicts." (Jean A. S. Strauss 1994:114).

In all these cases the children benefit from adoption, as it is more valuable for them to have parents rather than not. But to say that adoptees are better off having parents is not to say that adoptees would prefer to have adoptive parents than to have their genetic parents; nor is it to say that adoptive parents would prefer adoption to having their own genetic children. An analysis of some of the ills and benefits of adoption would give us a clue as to whether it is more preferable and so more valuable to be adopted or to have genetic parents, given a hypothetical condition that the adoptive and genetic parents have similarly equivalent

status. But these issues will shortly be discussed more carefully in discussing the disadvantages of adoption.

The joy of Parenthood, is therefore one of the most important benefits and values in married life, which IVF/ET sometimes brings to those, who, without this procedure, would have been without the joy highlighted above. But does not adoption bring parents the same joy? As has already been suggested above, to the Nigerian, life is most meaningful when it is able to generate another life for the continuation of the human species. The most valuable portrait one can paint of oneself is to have a child of one's own genes to behold. It is from this horizon that a non-Nigerian needs to be educated to listen to the heart beat of childless couples who desire to have children of their own genes rather than resorting to the adoption of children who are other persons' portraits. Therefore, there is a sharp difference for Nigerians and the many cultures and individuals who are like them in this regard, between adoption and efforts to have one's own genetic child.

It should be borne in mind, moreover, that Nigeria is not an individualistic culture. The community and extended family structure of this society, implies that many more people share the joy which IVF/ET makes possible by its provision of a child to a childless couple. This contrasts with the state of unhappiness which the condition of barrenness brings with it to the community. Shared joy

implies shared sadness. That is, it is not the subjective or selfish or idiosyncratic preferences of individuals for genetic children that is at stake here. Very deep culturally held values and a view of life's meaning are at stake. In the view of this, it is not only more valuable to experience the condition of joy in relation to bearing one's own children through IVF/ET, in comparison to sadness in relation to the state of infertility, it is also a far greater value to strive for one's own genetic children through IVF/ET than to resort to adoption.

It has been claimed that IVF/ET is a painful, and an expensive process of childbearing. But it is a process worth more than the price, pains and sufferings it involves and worth more than the agonizing condition of childlessness in marriage due to infertility. In its most literal meaning, the local Nigerian saying: "the individual that has a human being is wealthier than the individual that has money" is a witness to the foregoing claim.

IVF/ET would in some measure be a valuable technique of checking the threat of infertility as a menace to the continuation of the human species. For from a Nigerian view point, every line of human life that is threatened to die out due to infertility, can be considered as an endangered species. Earlier in this work, we merely sketched out some of the causes of infertility. Those causes and a bunch of others, if unchecked by some kind of medical intervention

could proliferate and endanger some of the most talented members of our human society.

The disadvantages of adoption

Adoption is fraught with its own inherent problems. The most noteworthy of the problems are psychological and social in category. Some adoptee, their adoptive, and genetic families can suffer significant psychological and social damages. Sometimes adoption can be divisive of our basic social institution - the family. The adoption case of Jessica DeBoer is a classic example. Carole A. McKelvey and Dr. JoEllen Stevens (1994) give a descriptive account of the anguish of the genetic and adoptive parents of Jessica in their legal battle to secure legal custody right of Jessica. What follows is but a partial view of some of the negative reactions of society, to the case referred to: "Thousands of couples hoping to adopt also felt a catch in their throats. With such dramatic evidence that birth parents can regain their children, many grew reluctant to open themselves up to such sorrow" (McKelvey and Stevens 1994:7, emphasis mine). Imagine then, the sorrows and anguish which the adoptee's biological and adoptive parents were going through, because of fear of the possibility of losing Jessica. The sorrows and anguish of Jessica's adoptive parents must be imagined with the true background that this couple is infertile. Worse still, is the fact that a two year old baby is in the

middle of the turmoil and sufferings which have arisen from her adoption.

Admittedly some of these difficulties with adoption for adopted children and their parents could be lessened by changing adoption policies. But there are many important moral and public policy issues involved in such policies and such changes may and perhaps should not happen. So adoption must presently be compared with IVF/ET as it is, with all the problems it has.

The search by an adoptee for his/her genetic parents or mother or father, which follow long after adoption is instructive for the present study. There is, for many adoptees, a longing to find what is missing in one's life; that what is missing is valuable in one's life to be sought for. Or as one adoptee put it:

"Some adoptees, who never felt a part of their adopted homes, perhaps are looking for a mother or father when they choose to search. But I wasn't. I searched, not to find parents, but to find pieces of myself that were missing. I don't intend to make it sound like all I wanted was to locate a data bank. I wanted to meet a special person. She had given me life (Jean A.S. Strauss 1994:315).

This longing is closely tied to the longing for genetic children by infertile couples. There is a deep need in humans for genetic bonds to one another.

In some instances, there is also a damaging psychological effect which living in an adopted environment can create in a child. Strauss (1994) describes the feelings of some of the adoptees "interviewed for Jill Dremntz's book, How It feels to Be Adopted ".

One adoptee narrates her state of discomfort in her first reunion with her birth family:

"They had a big family gathering, which included (several members of my birhtfamily).... I was too overwhelmed by it and felt uncomfortable. Everyone treated me like a relative, which bothered me because I didn't feel that way. At one point, someone who was talking to me referred to (my birthmother) as "your mom" and I didn't like that at all and said so. If I hadn't said anything I would have felt guilty and that wouldn't have helped in the long run" (Strauss 1994:312-313).

It was not just the adoptee's well-being and feelings that are at stake but also, those of other people who are related to the adoptee either by blood or adoption. Such a reunion one would imagine, should evoke joyful feelings. But it is not always the case. Adoption often is spoken of in hurtful words or language especially following a reunion of an adoptee with his/her birth family. For the words or language we use play essential roles in our connectedness. Terms such as "'Mother,' 'father,' 'daughter,' 'son,' are powerful words, words that automatically conjure up specific

images and expectations" (Strauss 1994:313). They are capable of evoking feelings of discomfort and sadness. Consider this description:

Lee, my own birthmother, wrote of the time following our reunion: "Jean is so hung up on labels and names. I'm definitely not her mother, but I struggle with 'What am I?' Her two little boys are related to me, but how?

Language or at least my preoccupation with it, also drove my sister Sue crazy. She wrote, 'When people call my sister Jean my half-sister I just cringe and say, Which half is my sister? I know adoptees have their mothers and sisters and brothers and nobody wants to confuse anyone, but do we have to label everything? What is my mother supposed to refer to Jean as? A daughter? A birthdaughter? A fetus?!'

Lee is accurate in what she wrote about the months following our reunion. I was hung up on labels and names. I struggled to define who she was in relation to me in my adult life. She had carried me for nine months, given birth to me, then courageously let me go (Jean A.S. Strauss 1994:313).

Jean is not alone in her concern about how to define her ties with her birthfamily and therefore the confusion and psychological imbalance she experiences. Another adoptee wrote about her discomfort:

I wish you [her birthmother] would stop identifying members of your family as my sisters, my aunts, etc. That makes me feel like I'm being pulled into your family before I'm ready. I just don't think of your family as my family. I don't know if I ever will.... It's you that I wanted to find, not a family (Strauss 1994:316).

In yet another interview, a young adoptee recalled:

It upset me when [my birthmother's] friends would say stuff like, "So you're Alison's daughter." I didn't know what to say. I sort of went along with it because I didn't know what else they would call me, but by not saying anything, I felt like I was taking away something from my mom. It's confusing because I don't know how to categorize my relationship with Alison. I don't want to think of it as purely biological, but I don't know how else to define it. I feel ridiculous introducing her as "my friend," and yet I certainly don't think of her as my mother (Strauss 1994:316-317).

One adoptee illustrate the unhealthy psychological state of mind and confusion which can exist among adoptees, their adoptive parents and their genetic parents, with an analogy:

"As humans, we tend to describe the unknown by comparing it to things that we already know. What do frogs taste like? Kind of like chicken. Are they chicken? No. And neither is your birthmother 100 percent your mother nor your adoptive mother 100 percent your mother (Strauss 1994:317).

For many adoptees, then, it is very painful to be in such a divided state of being and loyalty to two different families' influences in one's existence. As Straus says, one should not be surprised that many adoptive parents feel extremely threatened by adoptees's search for their

biological mothers or parents. One of the reasons for such a threat is as Strauss correctly supposes that the need of their adopted children to know their birthparents could easily be interpreted as a failure on the part of the adoptive parents. "If they had done a better job, their child would not need this connection" (Strauss 1994:102).

The need for an adoptee to search his/her genetic parents demonstrates an important fact about adoption in relation to infertile couples; namely that an adopted child is not completely the child of the adoptive parents. Another fact is that the adopted child has two competing roots or heritages. As Strauss explains: "The heritage through the adoptive family is experiential and social, not physical" (1994:103). In connection with this kind of realization, Florence Fisher, has written that: "one 'cannot sign away chromosomes and genes...'" (Lamport 1988:113). Consequently, for infertile couples who might choose adoption, it remains true that:

while the adoptee and the birth parents can begin to resolve their loss and pain through being reunited, the adoptive parents have no real ability to resolve their own loss and pain. There exists no 'search' for them. They can confront their pain and learn to accept their losses ... But they cannot change that there is no one for them to 'search' for. ... The unborn children they may grieve do not exist (Strauss 1994:103-104).

The above citation among other things, makes clear the fact that the desire of some infertile couples are not truly met by adoption. As has been said already, when the adoptees leave to reunite with their genetic parents, the pains and reality of childlessness revisit and haunt their infertile adoptive parents. Here, too, some of the points of the adoptive situation might be lessened by children not seeking birth-parents, etc. But the point is that there is a deep human need for having genetic family relations that adoption cannot satisfy and that IVF/ET, if successful, can. So a policy that would favor adoption over IVF/ET would not generally be the better option; IVF/ET should be supported.

Of course adoption does not only concern infertile couples. It can be argued that adoptions serve the needs of children much more, and the needs of a society seeking to provide abandoned children or orphans with homes; that is, much more than it satisfies the desires of childless couples for children. For instance, it can be contended that the adoption of children by numerous married couples who already have many children of their own, is not an effort to satisfy their own desire for a child but an attempt to provide the parental and other needs of a motherless and fatherless child. By doing so, society will address some of the negative experiences which are direct results of children being parentless. Opponents of IVF/ET, and advocates of adoption, may also claim that a policy supporting IVF/ET

exaggerates the desire of infertile couples to have their own biological children. These opponents would argue, as some have done, that although some childless couple may desire to have their own genetic children, "Not all infertile couples will want children..." (Uniacke 1988:243).
Granted!

Admittedly, for those who desire and need children, and are absolutely satisfied with adoption, then having biological children would be viewed as unnecessary. For such couples, therefore, infertility would not be so serious matter to warrant IVF/ET especially because some risk of harm and many psychological and financial costs are associated with the procedure. These adoptive parents would not view having their own genetic children as a great value, but only having a child. So for these couples, having a genetic child is not of a greater value than having an adopted child. However, there are also many couples who desire very strongly to have only their own genetic children.

Moreover, it should be clearly borne in mind that, the above advantages of adoption are only available in a society where there are many children to adopt. In a society where the circumstances for adoption are a rarity, as is the case in Nigeria, the weight of the value attached to adoption as analyzed, therefore significantly diminishes. Given this additional difficulty, as well as the risk of significant

pains resulting from adoption, adoption seems to have serious drawbacks as an alternative to IVF/ET, especially for Nigeria's childless couples and cultures and countries like it.

Some hidden dangers of adoption revisited:

As already mentioned, one might minimize pains of adoption by keeping adoptive parents' identities secret. On this topic there is plentiful evidence about the effects of secrecy surrounding adoption. In the United States of America where democracy is at its best: "Over the years the child's best interest concept has evolved to enshroud the adoption process in secrecy to the extent that forty-five states and the District of Columbia have sealed records statutes" (Lampport 1988:110). Lampport says that "The often touted justification for secrecy is 'the best interest of the child.'" This implies that vital information about the pedigree of the child is inaccessible both to the adopted child and to his/her adoptive parents. This issue of secrecy underscores some of the inherent dangers in adoption.

"Children grow up and ask questions, questions their adopted parents are unwilling or unable to answer." When they are not told because of this unwillingness, "they are left to wonder and fantasize, and later to search for the information about their natural parents on their own" (Lampport 1988:111).

One can only imagine the mental agony that the adoptee suffers upon learning that his/her ancestry is anonymous (where at best the adoptive parents tell the child the truth that he/she was adopted. Imagine further the psychological anguish an adoptee and his/her adoptive parents go through when a medical record that contains vital information of utmost concern to the adoptee's health, is available but he/she has no right to access it simply because of maintaining the secrecy or anonymity of the adoptee's ancestry or parentage. "In a world where scientific progress is as prolific as it is today, and where "adult adoptees are becoming more aware of the importance of hereditary aspects of illness, physical features and life span" (Lampert 1988:113); there will be increasing number of adoptees who will like to have information about their medical history. The current secrecy and anonymity in adoption certainly do not augur well for the well-being of adoptees and their future generations. The possibility of detecting a deleterious hereditary disease or other defects which sometimes are contributive to infertile conditions, are rendered ever more remote within the prevalent secrecy in an adoption.

An infertile couple who are aware of such secrecy but who nevertheless adopts a child of an anonymous heritage will always be filled with anxiety about the future health of the child. This is not to say that similar anxiety does

not exist among fertile couples who are carriers of such diseases, as has just been described. But, one's attention is called to the difference in the anxieties alleged above. The later is based on fact, the former is not.

Lampport reports yet another set of problems which are particular to children of incestuous relationship; to the medical doctor, and to the potential adoptive parents. According to Lampport (1988), although the number of children resulting from incestuous mating is difficult to ascertain, because some of the women fail to report the father of the child, incestuous children are seen frequently. These children of incest "have increased risks of recessive disorders such as homocystinuria, mental retardation, cystic fibrosis, and various congenital malformations" (Lampport 1988:115). The following might make the point clearer:

a child seen in the clinic was the product of a half-sibling mating. The common ancestor was the child's grandmother. Both the grandmother and the father had mental disorders. The grandmother was a diagnosed paranoid schizophrenic and her son was also reported to have severe mental difficulties. The child's risk for schizophrenia was significantly increased because of the increased number of common genes (Lampport 1988:115).

Given the value of children in Nigeria, and given the social stigma of not having one, an infertile couple desperately seeking a child of any kind, (and there are many such

instances in Nigeria), might adopt such a high risk child as in the citation above. However, this couple would also have to bear the daily burden of anxiety of what the child's mental state might be in the future, and all the more so given the proposal being considered here of total secrecy about a child's birthparents. Such a policy is not an obvious corrective to the problem of adoption already discussed.

Numerous parents of IVF/ET children today are happy to have their own genetic children through IVF/ET. They are living evidence that IVF/ET can be the answer to the desire of many couples vis-a-vis infertility. This is not to deny the view that there are also many infertile couples whose desire for children have been happily filled by adoption. Nor should the fact be ignored that not all IVF/ET are successful. Nevertheless, this point in conjunction with the fact that not all IVF/ET are successful does not constitute sufficient evidence to override a policy advocating IVF/ET.

Given the disadvantages of adoption, particularly on the issue of adoptees searching for and reuniting with their genetic parents, some infertile couples could never feel that an adopted child could fill the void which a genetic child of IVF/ET fills for them. In this sense then, a genetic child is more valuable to some adoptive parents than an adopted child would be to them. This is not to imply that one child is more important or valuable than any other

another per se. What it implies is that a genetic child of IVF/ET, would be more valuable to some infertile couples than an adopted child, since a genetic child is the only child that can fill the emptiness which these childless couples feel, that is, a child they can truly call their own.

(b) Surgical reconstruction of the oviduct and other surgical procedures

Another alternative to IVF/ET is "surgical reconstruction." Leon R. Kass is one of the proponents of this alternative. The benefits of this procedure have been summarized by Kass who concludes: "This therapeutic surgery for women is without possible moral objection or adverse social consequences" (1985:51). But not having moral objection or social consequences does not by itself make it more beneficial and more effective than other competing alternatives nor preferable to those whose lives they seek to affect, other things considered.

The values and disvalues must be weighed. Kass bases his position on the risks to the embryo from IVF/ET. "The use of IVF/ET to initiate a new human life - unlike oviduct repair, ... and, of course, sexual union - involves the necessary and deliberate manipulation of human embryo itself" (1985:52). According to Kass, the effect which manipulation will have on the child, attracts serious moral questions about the safety of the embryo: "Does the parents'

desire for a child (or the obstetrician's desire to help them get one) entitle them to have it by methods which carry for that child an unknown and untested risk of deformity or malformation" (1985:52)? For that reason Kass concludes:

"Therefore, should both options be feasible and available, oviduct repair is to be preferred over artificial fertilization both in principle (namely, one should use the least objectionable means to achieve the same unobjectionable end) and in practice (1985: 51-2).

On this specific point of risk to the embryo, however, it has already been argued above in Chapter Four that the benefits of IVF/ET to all affected outweigh these risks.

Therefore, for Kass to make his case about surgical repair being superior he would have to show that it yields an even greater net value for those affected than IVF/ET does. This he failed to do even in those cases where such surgery addresses the actual cases of infertility because oviduct repair is not a sure remedy and in fact has been replaced by IVF/ET as the treatment of choice. Kass himself writes:

There is an alternative treatment for infertility due to tubal obstruction, namely surgical reconstruction of the oviduct, which, if successful, permanently removes the cause of infertility (i.e., it treats the underlying disease, not merely the desire to have a child). At present, the success rate for oviduct reconstruction is only fair, but with effort and

practice, this is bound to improve (1985:51; emphasis mine).

That is, it should be pointed out that "surgical reconstruction" is not a certain alternative because, in the citation above, the phrase "if successful", suggests that it is still a conditional, an uncertainty, a mere hypothesis in deed experimental. Kass fails to give any statistical records of his suggested procedure's success rate, so the most that can be said from Kass's advocacy at this point is that infertile couples are no better off with this alternative than they are without it either in particular or in general. Further data on success rates will be offered below.

But in addition, IVF/ET has long passed the experimental stage. McShane's words in 1988 indicate that IVF/ET was already an established practice and had been for some time. "The accomplishment in 1978 of a normal birth following fertilization of the egg outside the body was the culmination of decades of reproductive research ..."
(1988:34). aspirations of those burdened by the disvalue of infertility.

In addition, it should be recognized that, Kass's alternative is seriously limited in its range of application to infertile couples because, causes of infertility in women are more than tubal obstruction. The prevalence of the major causes of female infertility and the deficiencies of

developed methods of treating them were among the reasons for the development of IVF/ET in the first place. To this fact, McShane says:

There have been major advances in the use of medication (such as danazol) to treat endometriosis and some progress in the surgical approach to adhesions and tubal obstruction due to both infection and endometriosis. But these are still the most difficult category of fertility problems and were the original reasons for the development of in vitro fertilization (1988:33-34; emphasis mine).

It is quite obvious in the above citation that infertility remained intransigent despite the major advances in the areas emphasized. Therefore Kass's willingness to suggest that IVF/ET should be set aside altogether in favor of surgical oviduct repair is without foundation. In fact, oviduct repair is of no value for a variety of infertility conditions in men; these can be addressed presently only by IVF/ET. For example, Patricia M. McShane explains this and reinforces the previous point. "Tubal factor infertility is the most common reason for using IVF, followed by male infertility, unexplained infertility, and cervical or immunological factors" (1988:34).

From Chapter One the reader may recall that "bilateral absence of the vas deferens" is one of the major causes of male infertility. Some statistics show that in these area of common causes of infertility to which surgery is impotent,

IVF/ET has been found useful. For example referring to IVF/ET success rate, McShane documents that:

"one fertility unit reports that over a 2 year period, infertile couples with ovulation disorders achieved approximately 60% pregnancy rates; over 35% pregnancies for those with male infertility, but only 25% success for women with tubal damage or endometriosis" (1988:34).

The category of "unexplained infertility" is also significant and cannot be assisted by oviduct repair. As Foad Azem et al explain: "In a considerable proportion of infertile couples, there seems to be no explanation for their condition when standard methods of investigation are used" (1994:1088). The theory is that "Such unexplained infertility may be the result of both male and female factors" (Azem et al 1994:1088). The following is noteworthy:

The designation 'unexplained infertility' is applied to couples who have failed to achieve pregnancy despite evaluations that uncover no obvious reasons for their infertility or to those who remain infertile despite correction of all detectable causes of infertility.... Approximately 10% to 15% of infertile couples will be diagnosed eventually as suffering from this entity (Azem et al 1994:1090).

This is why IVF/ET has become one of the standard options today for fulfilling the desire of some infertile

couples to have their one's own genetic children. As Azem et al have said, "In recent years, the therapeutic options for alleviating infertility have increased dramatically and now include ovarian superovulation... IVF, ... GIFT, and zygote intrafallopian transfer" (1994:1090).¹ In such cases neither surgical reconstruction of the oviduct nor any form of surgery for some conditions² which affect 40% of infertile male can be of any avail.

This argument does not however, detract from the sometimes positives results to be obtained from surgical procedures. One such procedure is "subinguinal varicocelectomy"³ where varicoceles is the cause of some male infertility. For example, the following positive result was noted in a comparative study made of infertile male "patients undergoing laparoscopic varicocele repairs" and those of infertile male "patients undergoing "subinguinal varicocelectomies":

Pregnancies occurred in both treatment groups. Four pregnancies occurred in the subinguinal treatment group and two pregnancies occurred in the laparoscopic treatment group. However, of these pregnancies, one

The reader is reminded that GIFT, and zygote intrafallopian transfer are not different from our definition of ivf/et.

Varicoceles is one such conditions. "Varicoceles is an abnormal dilation of the veins of the spermatic cord.... its prevalence among infertile males is 40%" (Erik Enquist et al 1994:1092). Fortunately "Several surgical treatments now are available for the ligation of varicoceles" (Erik Equist et al 1994:1092).

Subinguinal varicocelectomy is a surgical procedure used to repair varicoceles. See footnote 2 in this section.

miscarriage occurred in the subinguinal treatment group. (Enquist et al 1994:1095).

The above cited pregnancies occurred among fourteen patients who underwent laparoscopic surgery and 33 patients who underwent subinguinal varicocelectomy, from January 1991 to December 1992 (Enquist et al 1994:1094).

The value of a surgical procedure that can alleviate infertility is that it avoids the risks to the embryo that have been discussed above, and especially if its rate of success for pregnancy has been found to be high. In the case of varicocelectomy, the success rate stands much higher than that of IVF/ET "37 to 42%" (Robert M. L. Winston and Alan H. Handyside 1993:932).

However, it is clear that such surgical procedures cannot help childless couples whose childlessness is due to other causes. To take one example, consider azoospermia. "Azoospermia is common in the infertile male population" (Herman Tournaye et al 1994:1045). According to Tournaye et al, azoospermia is "caused either by spermatogenic arrest or by obstruction of the genital tract" (1994:1045). It is noteworthy that "Although there is no treatment for the former cause, the latter can often be treated successfully by surgery" (Tournaye et al 1994:1045).

Kass's option for the surgical reconstruction of the oviduct as the preferred solution to infertility rather than

IVF/ET seems to have ignored the couples whose childlessness may be as a result of spermatogenic arrests. There surely is no reason to think that simply because a procedure is surgical, its benefits are therefore significant; too many surgical procedures have success rates that are appallingly low. Tournaye et al give an example:

However, if azoospermia is the result of congenital bilateral absence of the vas deferens, the classic surgical approach, i.e., the creation of an alloplastic spermatocele, has been reported to be successful in a maximum of 4% of cases. Therefore this condition has been viewed as almost irreversible sterility (1994:1045).

By comparison IVF/ET at worst averages 3 to 4 times greater success rate than the above. For example, Robert M. L. Winston and Alan H. Handyside have said that:

Human in vitro fertilization (IVF) is surprisingly unsuccessful. In the United States, overall birth rate per IVF treatment cycle is 14%, from 16,405 oocyt retrievals. ... In Britain, the live birth rate from each IVF treatment cycle started is 12.5% ... (1993:932).

But even at this low success rate of IVF/ET, it cannot be argued that it is still much more beneficial both in terms of its percentage outcome and in terms of its comprehensive application to all kinds of infertility problems and lessens more of this ontic evil than its competing alternative does.

With specific regard to surgical reconstruction of the oviduct to repair tubal blockage Kass says that "the success rate for oviduct reconstruction is only fair" (1985:51). But Uniacke writing 3 years later describes it as "disappointing; and sometimes a woman's fallopian tubes are not there to be repaired" (1988:243).

But the above contention is not all there is with IVF/ET success rate. More recent developments in Superovulation which makes possible more than one fertilization at a time gives rise to even greater opportunity for pregnancy, and so increases the rate of IVF/ET success rate. For example, Winston and Handyside attest to this when they say that IVF/ET:

Success is greater when more than one embryo is transferred simultaneously. Superovulation hopefully leads to fertilization of several oocytes, and it is common to transfer several embryos to the uterus, anticipating that at least one will implant (1993:932).

The direct outcome of this newer procedure is that higher per centage of "Pregnancy resulted from 13% (184 out of 1436) of transfers when three or fewer embryos were transferred, 25% (238 out of 944) with four, and 26% (229 out of 871) with five or six embryos" (Winston and Handyside 1993:932).

This development is not without some negative outcome.

Superovulation and multiple embryo transfer. While increasing the chance of success of pregnancy, also increases the likelihood of deaths of embryos. Some of its negative consequences have been reported:

Simultaneous transfer of multiple embryos increases the incidence of multiple pregnancy and the possibility of miscarriage and prematurity. Of triplets and quadruplets born after IVF, 64.1% and 75%, respectively, required admission to intensive care, often for weeks. Multiple pregnancy also has considerable social, social economic, and psychological impact on parents. Prematurity after assisted conception was associated with a perinatal mortality rate of 27.2 1000 ..., three times the United Kingdom average for births after natural conception. The increased mortality was almost entirely due to multiple pregnancy (1993:932).

Such negative results may seem to make the practice of superovulation and multiply transfer of embryos on balance a less desirable alternative than other methods of infertility treatment. But the argument offered in Chapter Four led to the conclusion that every single instance of risk to embryos for the sake of having a genetic child is justifiable for clear consequentialist or proportionalist reasons. If this risk were sharply multiplied without a significant increase of live births, this argument would have some weight. But the increase in the number of embryos at risk occurs together with a sharp increase in live births. Once again, the realities of superovulation and multiple embryo transfer reminds us of the realities of ontic evil in human

action, and of the necessity of comparing all alternatives in terms of the total values and disvalues brought about for all affected. In this case, the argument offered in Chapter Four still applies. Risk to embryos is more than balanced by the value of possible life to the embryo and the value of genetic children to the parents, especially in a culture like Nigeria's.

In fact, more experience with perinatal mortality associated with multiple transfer of embryos during IVF/ET procedure, has produced valuable lessons to minimize the ontic evil of embryo death or loss and to maximize success rate of human conception and live birth through this means. This is to say that the level of responsibility taken by those involved with IVF/ET has been stepped up to minimize embryo loss.

Added benefits that accrue from the knowledge gained from these unintended mishaps is scientific understanding of some pregnancy problems associated with of infertility, such as miscarriages and the formation of abnormal oocytes.

"Superovulation preceded by desensitization of the pituitary by gonadotrophin-releasing hormone (GnRH) agonists, and reduction of luteinizing hormone concentration, before egg collection may improve egg maturation, which may in turn result in fewer miscarriages. GnRH antagonists and recombinant follicle-stimulating hormone (rFSH) may possibly help reduce the incidence of defective oocytes" (Winston and Handyside 1993:932).

Or as Patricia M. McShane put it, "Meanwhile, IVF has had tremendous impact on our understanding of fertility and should help physicians in their approach to infertility in the future" (1987:31). Among other points one might grasp from here is that, all that is to be gained from IVF/ET, is not only the reproduction of a child, though, this is its chief goal; but also knowledge gained from both successful and unsuccessful IVF/ET can help future patients and medicine in general.

In fact, the knowledge gained has helped to dramatically improve the success rate of IVF/ET some programs. The following result is an example: "For the last 3 years, we have seldom transferred more than two embryos simultaneously . . . , and have been able to maintain pregnancy rates of 37 to 42% per transfer with only the occasional (1%) triplet pregnancy" (Winston and Handyside 1993:932).⁴

To return to the surgical procedure, there is also evidence of similar efforts to improve surgical technique in infertile conditions that permit surgery as means of

. Other studies or experiences drawn from ivf/et has shown that implanting numerous embryos at a time increases chances of heretotopic pregnancies (the formation of pregnancy in an abnormal site) but reduction of the number yields better result. For example, "In 1991, the maximum number of embryos transferred at University Hospital [London, England] was reduced from five to three to lessen risk of multifetal IUP [Intrauterine Pregnancy]. It appears happily, that this reduction has an unforeseen tendency to reduce heterotopic pregnancy also. ... Risk of heterotopic gestation is augmented by transferring four or more embryos." (Ian S. Tummon et al 1994:1067). This study goes ahead to share this piece of valuable knowledge with other clinics of ivf/et in these words: "Programs that do not limit uniformly embryo numbers to three may wish to give consideration to such a limitation for women with distorted tubal anatomy" (Ibid 1994:1067). Cf. also William Schoolcraft et al, "Improved controlled ovarian hyperstimulation in poor responder in vitro fertilization patients with a microdose follicle-stimulating hormone flare, growth hormone protocol" in, *Fertility and Sterility*, Vol. 67, No. 1, Jan. 1997.

alleviating infertility. The low rate of the success of the surgical approach of alloplastic spermatocele, as indicated above, has been improved upon by microsurgical method of aspirating sperm in cases of "congenital bilateral absence of the vas deferens". For example, Tournaye et al say that:

... since the report by Temple Smith et al ... on the successful use of microsurgically aspirated epididymal sperm in IVF-ET, an effective fertility treatment for these patients with congenital bilateral absence of the vas deferens has become possible. The combination of microsurgical epididymal sperm aspiration and IVF-ET has been shown to offer couples who are suffering from infertility because of congenital bilateral absence of the vas deferens a chance to have their own genetic children (1994:1045-1046).

But as one can see from this citation, this particular microsurgical method still depends on IVF/ET before it can produce children. So, this alternative neither equates with, nor does it give evidence of being better than IVF/ET in the attempts to lessen the problem of childlessness among married couples. Nor, as has been indicated, are surgical procedure comprehensive enough to tackle the broad range of forms of infertility enumerated in our survey of issues with some reasonable chances of success. The magnitude of types of infertility simply overwhelms means of surgical reconstruction. Therefore IVF/ET when compared with "surgical reconstruction of the oviduct" and other such related surgical means, in their pros and cons, is more

beneficial than this alternative and Kass's effort to turn attention away from IVF/ET and towards surgery is not justified.

As a matter of fact, Kass himself seems to accept the unavoidability of ontic evil in the form of risk to embryos, and the consequent need to carefully weigh values and disvalues when he writes:

To insist on more rigorous standards, especially when we permit known carriers of genetic disease to reproduce, would seem a denial of equal treatment to infertile couples contemplating in vitro assistance. It also gives undue weight to the importance of bodily harm over risks of poor nurture and rearing after birth, or, to repeat, against the goodness of bodily life itself. Wouldn't the couple's great eagerness for the child count, in the promise of increased parental affection, toward offsetting even a slightly higher but unknown risk of mental retardation? It should suffice that the risks be comparable to those for ordinary procreation, not much greater but no less (1985:55).

But Kass does not offer any argument to support his final standard of no risk of harm greater than in ordinary procreation. Infertility is itself an ontic evil; and the means available to address and remove this evil may require risks of harm to be faced that are greater than where this evil does not exist. Kass's rigid standard is unjustified. What is needed is a conscientious weighing of all alternatives in terms of all the values and disvalues they produce.

(c) Adjustment to infertility and acceptance of childlessness as an alternative.

It was argued above, that some infertile couples may not want children. With that understanding, some sterile couples can adjust to infertility and accept childlessness. This would mean that among other things, bearing children is not at the top of the list of their value and needs. This may be because the risks and burdens of IVF/ET and other remedies are greater than the value of children or because the suffering and unhappiness associated with childlessness are not a great a negative for them. In this light Uniacke is correct to note that the "type of infertility for which IVF is a possible remedy results from a physical problem which itself is not a barrier to a very healthy life" (1988:244).

This perspective represents one end of a spectrum of points of view of infertile couples. But as Uniacke observes, at "the other extreme, some clearly become distressed to the extent that the unfulfilled desire for a child overshadows all other aspects of their lives" (1988:244). But sufferings of infertile couples need not be extreme before they deserve our concern and attention. CDF recognizes this when it says that the "suffering of spouses who cannot have children or who are afraid of bringing a handicapped child into the world is a suffering that everyone must understand and properly evaluate" (1987:33), as in deed it must now be.

Some people may argue that after "an initial period of even quite intense disappointment many people accept infertility and lead qualitatively very good lives despite it" (Uniacke 1988:244). It cannot be gain-said that whether infertility is acceptable or not, depends heavily on whether bearing one's own genetic children is a value that gives principal meaning to and sustains couples in unity in marriage. Much will depend on the amount of weight one places on the value of children, and how much the overall life style and well-being of couple would be negatively affected or not if bearing genetic children is foregone. But again, some couples who desire children but cannot bear them suffer enormously. Even CDF, in its opposition to IVF/ET, admits this fact when it says "The suffering of spouses who cannot have children ... is a suffering that everyone must understand..." (CDF 1987:33). In fact, CDF considers the desire to bear children to be a characteristic of the human condition. For example, CDF says "On the part of spouses, the desire for a child is natural" (1987:33); and CDF acknowledges that: "This desire can be even stronger if the couple is affected by sterility which appears incurable" (1987:33-34).

The following statistical results of surveys among various groups of people about their opinions on the use of IVF/ET in the case of infertility reveal on one hand how much infertility is disvalued, and on the other hand how

much bearing a child is valued. The surveys also support the view that infertile couple are more likely to be unable to adjust to their infertile condition and accept childlessness, than they are likely to adjust to these conditions because widely accepted views in most societies point in the same direction.

"A Japanese survey of married women aged 20-50 years in May 1984... gave approval ratings for the use of IVF by a married couple if it was their only means of having children of 62%, with disapproval by 33% of respondents" (Macer 1994:29). Even priests gave positive approval. "Buddhist priests ... were surveyed at the end of 1986, and 43% approved of IVF for married couples with 22% disapproving and 35% undecided" (Macer 1994:29). Still "Japanese psychologists in a survey conducted in May 1983 ... 55% approved, 16% disapproved and 27% were undecided" (Macer 1994:29). Yet in another survey conducted in New Zealand in 1984, "88% of respondents were in favor of IVF for use by married couples, and only 8% were against" (Macer 1994:30). In Switzerland, "74% of Swiss people overall supported assisted procreation ... subject to restriction on embryo storage" (Macer 1994:30).

These examples are only drawn from three societies,⁵ of course; but there is arguably a pattern of public opinion in

. African societies' views in this direction is discussed in some detail in the next alternative, "polygamy."

favor of this method of human reproduction, IVF/ET, for married couples, rather than holding that they should accept infertility as an alternative.

If these are the views of people who are not affected by infertility, it is surely likely, for a greater reason, those who are directly affected would more approvingly welcome this technology rather than merely accept their situation. The proposal being examined here is that acceptance of childlessness is a generally better alternative than IVF/ET for infertile couples. While some couples may accept it without great anguish, many do not and many people in the general public who are not affected judge their pains reasonable and the use of IVF/ET to try to address them justifiable. No general rejection of IVF/ET can be supported by such an argument. Instead each infertile couple must conscientiously weigh all the values and disvalues involved in their own case; and public policy, it has been argued should support IVF/ET as one of their options.

It is important to say that an infertile woman who desires to have her own child ordinarily is not simply referring to the pleasure of being pregnant and actually bearing the child. Infertile women suffer greatly by reason of the absence of genetic offspring, of parenting and sharing their life with their child, and other values of

having genetic children discussed above. Consider this statement from an infertile woman:

Please tell your readers it is never OK to ask, 'when are you going to start a family?' What may seem like an innocent question can be as painful as a stab in the heart.

Childless couples ache when they see a beautiful baby. They go completely to pieces when they read about newborns found in plastic bags in dumpsters. They are angry that life has treated them so unfairly and wonder what they did wrong. They bargain with God, thinking perhaps if they give up this or that, they might get pregnant and have a child.

Going through test after test and from doctor to doctor is pure agony. They live with the hope that the next test will reveal some good news. After a while, they are emotionally exhausted. They feel cheated and "different." It seems that no one understands. But life goes on, and friends and relatives get married and have children. When they hear that the Smiths or the Joneses are having their third or fourth and aren't very happy about it, they become furious - then depressed. Why is life so unfair (Anonymous author, Ann Landers 1996: c-4 1996:c-4)?

Such powerful suffering from infertility will be especially common in cultures that view childlessness, as an individual's break from the continuity between this and the other world or between the human and the spiritual world. This continuity issue is one of the major reasons for the irreplaceable value which Africans generally place on bearing their own genetic children. Thus Caldwell and Caldwell write that,

"the essence of the traditional belief system is the importance attributed to the succession of the generations, with the old tending to acquire even greater and more awe-inspiring powers after death than in this world and with the most frequent use of those powers being to ensure the survival of the family of descent (Caldwell and Caldwell 1987:409).

One would expect that acceptance of a life of infertility would have some special means of ameliorating the sufferings of childless couples to offer; for example, by providing them with some value or point of view sufficient to take the place of child-bearing in order to make infertility tolerably acceptable. But, especially in cultures like Nigeria, none is available. To an African or Nigerian, it sounds too harsh, too inhuman, and very surprisingly unsympathetic for anyone or group of people to suggest that childless couples could use involuntary infertility as an opportunity for services that promote the well being of other peoples' children or families. Consider the following lines:

Sterile couples must not forget that "even when procreation is not possible, conjugal life does not for this reason lose its value. Physical sterility in fact can be for spouses the occasion for other important services to the life of the human person, for example, adoption, various forms of educational work, and assistance to other families and to poor or handicapped children" (CDF 1987:34; emphasis mine).

In the eyes of the Nigerian society, the requirement for an adult to contribute to the well-being of society is the requirement to continue the line of progeny. It cannot be simply replaced with some other form of service. This requirement is not fulfilled until a child is born to a couple. As Mbiti writes: "To be productive, in terms of having children, is one of the essential attributes of being a mature human being. The more productive a person is, the more he contributes to the existence of society at large" (1969:142). IVF/ET is therefore a far more valuable alternative for an infertile couple who desires to fulfill this essential human responsibility for the continuation of human species than is adjustment to infertility and acceptance of childlessness.

The heart of Mbiti's statement is that in particular, every married couple is happy when it fulfills this essential attribute of being mature. In general, society is also happy because new members are being added to its number. To the contrary, infertility by its essence and function blocks and frustrates both the essential attribute and contribution to society by way of reproduction. As the Igbos of Nigeria proverbially say: "He/She who has a person is worth more than he/she who has money". Or as Onwuejeogwu says, "the number of children a woman bears and their sex enhances her 'status'" (1975:25). This is not meant to imply that, selfish enhancing of one's status is the goal of

having children. If this was true, it would mean that children are merely used as means and as property. Instead, these words primarily mean that a person/couple who has multiple children of both sexes has great satisfaction in life because of their contribution for the continuation of the human society and its well-being.

Polygamy⁶

Polygamy is a widespread phenomenon throughout Africa. Mbiti affirms this fact by saying that getting "married to two or more wives is a custom found all over Africa, though in some societies it is less common than in others" (1969:142). This implies that although polygamy is an African custom, it is not practiced by everyone; Mbiti confirms this when he says that "The proportion of polygamous families would not exceed more than twenty-five per cent of the population even in societies where polygamy is most practiced" (1969:144). Peter B. Hammond writes

. There are two kinds of Polygamy: "(a) polyandry - which exists when one woman has several husbands; (b) polygeny - which exists when one man has several wives" *A Commentary on the Code of Canon Law: Marriage Today*, by Bernard A. Siegle, 3rd. Revised ed. Alba House, New York, 1979, p. 25. Throughout this section, this work refers to polygeny when the term "polygamy" is used. It will be assumed that polygamy in the two senses above, is immoral in the eyes of many civil and religious societies, though not necessarily in all cultures. It must be borne in mind that before Christian and Islamic religions came to have foothold in Nigeria, there was nothing except Local Traditional religion; that is, a way of worshipping God, which each individual person's or community's ancestors handed down to their children. But, Traditional religion is not meant to connote a National organized religion comparable to Christianity or Islam. So, polygamy is meant as a cultural practice, not a religious way of life.

similarly that: "In most societies, however, regardless of the preference for polygamy, most domestic groups are monogamous..." (1978:186).⁷

However, among other important reasons for plural marriage in Nigeria, infertility remains one of the major reasons for this practice. Some men are polygamous only for the purpose of the good it sometimes serves - a means to bypass infertility in marriage in order to have children. Therefore it will be useful to examine polygamy as another alternative to IVF/ET, even though, of course, this is not an alternative proposed by CDF.

Surely, the most significant benefit of polygamy is that it sometimes enables a married man whose wife is infertile to have a child/ren if the man himself is fertile, and that the second wife is also fertile. Some African writers on the issue of marriage have noted that in African marriages,

. The societies referred to in this quotation, are African societies, of which Nigeria is one, and by far the most populated, and the most diverse. "In Nigeria there are at least two hundred and fifty languages - languages, not dialects; while in each language area there are several dialects some of which are *almost* distinct, different languages." *African Traditional Religion A Definition*, by E. Bolaji Idowu, SCM Press Ltd, 58 Boomsbury Street, London WC1..A fuller account of why polygamy came to be condemned as immoral and by who, can be found in, *Christian Missions in Nigeria 1841-1891*, by J.F. A. Ajayi, Longman Group LTD, London, England, 1965:103-108. See also *The Missionary Impact on Modern Nigeria 1842-1914, A Political and Social Analysis*, by Ayandele, Longman Group LTD, Longman House, Burnt Mill, Harlow, Essex, U. K. 1966: 334-338. What follows is significant: "The high sexual morality that prevailed in the traditional society was upset by Western civilization and its conception of monogamy, missionary enterprise beginning the process in the greater part of Southern Nigeria" (Ayandele 1966:336). It will be assumed here that polygamy is immoral.

"If the first wife has no children, ..., it follows almost without exception that her husband will add another wife, partly to remedy the immediate concern of childlessness, and partly to remove the shame and anxiety of apparent unproductivity (Mbiti 1969:142).

Obvious in this citation, are two goods which a fruitful polygamy accomplishes, namely "to remedy the immediate concern of childlessness"; that is to bear children, and secondarily "to remove the shame and anxiety of apparent unproductivity." Two additional benefits of a fruitful polygamy in the circumstance under consideration are noteworthy. One is that another woman is made happy, both by the fact that she is married and by the fact that she has born a child to keep open her line of human succession. The other is that it preserves both the first marriage and the second one. This is to say that polygamy as a means of bypassing infertility, when fruitful also helps to unite the man and his two wives.

But polygamy can have a down-side too. Experience drawn from polygamous marriages shows that this double union is not always possible. When this unity between first wife and her polygamous husband is not possible, the evil consequences can be enormous. But proponents of polygamous marriages in the circumstances in view will argue that whatever the disadvantages are, as will be shown shortly, polygamy that fulfills the two ends of bearing children and removing shame of unproductively is still morally justified,

because when these two good ends are achieved, especially the bearing of a child, then the goods outweigh all the evils of polygamy.

The claim that a polygamous marriage unites the first wife and her husband is intended to indicate also that polygamy prevents divorce. In other words, instead of a man divorcing his first wife for the reason of her infertility, he still lives and relates with her as his wife. But this does not mean that some husbands do not divorce their childless wives in order to marry another woman to bear a child, nor does it imply that some childless husbands do not neglect their wives, and bear children extramaritally (through adultery) while still living with their infertile wives.

The second aspect of the good of polygamy in the citation from Mbiti is to "remove the shame and anxiety of apparent unproductivity." This is a very secondary issue, in fact, and is contingent on the possibility of the primary goal of polygamy, namely to bear children. But the achievement of both of this principal goal and the secondary one must be seen in proper context: only with reference to the husband. The child to be born or that is born by a man's second wife whose first wife is infertile satisfies only desire for a child by the man or by the new marriage. It does not satisfy desire for a child in the first marriage except with reference to the husband.

So, a husband who resorts to polygamy to resolve the problem posed by infertility of his wife, does not actually solve the problem, but simply identifies the personal source of the problem. The husband has only succeeded in vindicating himself from blame in public eyes when his second wife is able to conceive and bear a child; his first wife remains infertile. This vindication has also a negative implication, putting the blame for childlessness of his first marriage on his first wife. Bearing this blame would understandably have a damaging and lasting negative psychological sense of worthlessness, guilt, and shame for his first wife. In other words, the good value that resulted from the man marrying a second wife and bearing a child/ren is also accompanied by a lasting evil impact on the first wife.

In many cases the childless woman develops ill feelings against her husband and jealousy towards his new wife. In many instances too, feelings of enmity develops in the household. This kind of enmity happens most often when the childless woman is in opposition with her husband's marrying another woman out of unflinching loyalty to the demands of Christian church authority. As Isichei records: "Some women were empowered by church support to refuse an unacceptable marriage, or leave one, especially where polygamy was involved" (1995:240). Usually such tensions and disagreement in the new polygamous household has a ripple effect

spiraling from the family to their extended families, creating alienation of one extended family from the other. This in turn affects social life and leads to boycotting of social events or community developmental programs.

However, such a step on the part of a husband to marry another woman, instead of bearing the suffering of childlessness with his infertile wife, only reinforces the claim made earlier in this work about the irreplaceable value attached to child-bearing in Nigeria. Also such a step on the part of the husband is unfair to his first wife in other ways, but more especially in the particular sense that the husband preserves only his own lineage at the expense of his first wife.

Some authors have pointed out some other disadvantages which critics of polygamy see in the use of plural marriage as a means to bypass infertility. For example, Mbiti notes that "Quarrels and fights among the wives ... are not infrequent" (1969:143). But is the possibility, or even probability of frequent quarrels, a strong enough disvalue to override the value in the resort to a second wife as a means to the desired child and the general human good of continuity brought about by this means? It does not seem so. People know before entering into marriage that quarrel is a strong probability, even between husband and wife, with or without children. Or as Mbiti says, "the problems of polygamous families are human

problems and are not necessarily created by polygamy as such; nor have they been solved or avoided in monogamous families either in Africa or Europe and America (1969:144). So, the objection that the wives of a polygamous marriage will quarrel is not a strong objection to override the good sought after by polygamous means. On this score, polygamy may appear to be a positively valuable practice on balance.

But other criticisms against polygamy as a way of bypassing childlessness seem quite strong, on the basis that it is disrespectful to the dignity of a woman. Experience drawn from the common occurrence among polygamous households seem to bear out the fact that the husband in the special condition under consideration gives preferential treatment to the wife who bears a child over the barren wife. Such practices will often compromise the dignity of his first but infertile wife. For example, Mbiti says it "is cruel for the husband to neglect some wives because he favors others especially the latest additions" (1969:143).

If it is true, as Mbiti says above, that some people (though unjustly) can favor their latest addition of wives, certainly then, it will be true that a man is even more likely to favor his new wife with a child/ren than the one without child/ren, given the pre-eminent value attached to children. This cruelty of neglect frequently leads the childless wife to even greater evils - divorce of her husband - an action which some Nigerian writers perceive and

interpret as a personal catastrophe, and one which must be avoided at any cost (cf. Nicholas N. Obi 1987:91). Again, divorce itself, by definition, severs the love and unity of relationship between the woman and her husband. In many cases, the woman is so aware of her helplessness that she embraces prostitution, partly as a reaction to the neglect of her husband and partly as reaction to her woeful failure in life to bear children. So Nicholas N. Obi writing about the variety of reasons for prostitution in Nigeria, notes that "For a married girl or woman, childlessness may well push her into it" (1987:109).

Obi goes ahead to point out both the potential and the and actual hazards prostitution is fraught with in what follows:

How odd, this world of ours! If it wasn't as odd, we would since have known that prostitution is non-reproductive and incompatible with the family system and therefore downright dysfunctional, and , if sufficiently widespread, would bring about a society's collapse. We would have known that since this ill is visible in our streets, it is most unhealthy to our youths. We would, undoubtedly, have seen prostitution as a social problem because, among other things, it institutionalizes the use of sex for pleasure alone, to say nothing of bastards that are brought into the world as a result. We sure would have all been aware of other social problems associated with prostitution - the spread of venereal disease, for example; ... (1987:110).

Moreover, the awareness on the part of the infertile woman that she is involved in prostitution, which

is a social evil which no descent family wants to be associated with, may lead her then to flee even her own parental family and community. In so doing, polygamy together with the woman's infertility becomes the beginning of a chain of events involving dissociation of spouses and then even families - a great evil.⁸

Because of the intricate nature of the Nigerian culture, other ways are available to avoid or minimize dissociation of husband and wife and their families, and the personal and social harms following divorce, and thereby maintaining unity. For example, in the Igbo sub-culture of Nigeria, by agreement with her husband, a barren woman sometimes freely arranges a second wife to bear children for her husband when she (the first wife) is the source of childlessness in the first marriage. This means that the woman realizes the indispensable value of a child in a marriage; but it also implies that the first wife and her husband are not willing to be separated from each other on account of the love they have for each other. In this instance, polygamy acts as a mediating factor, a socially acceptable therapeutic remedy for childlessness and other

.A fuller account of why polygamy came to be condemned as immoral and by who, can be found in, *Christian Missions in Nigeria 1841-1891*, by J.F. A. Ajayi, Longman Group LTD, London, England, 1965:103-108. See also *The Missionary Impact on Modern Nigeria 1842-1914, A Political and Social Analysis*, by Ayandele, Longman Group LTD, Longman House, Burnt Mill, Harlow, Essex, U. K. 1966: 334-338. What follows is significant: "The high sexual morality that prevailed in the traditional society was upset by Western civilization and its conception of monogamy, missionary enterprise beginning the process in the greater part of Southern Nigeria" (Ayandele 1966:336).

evil consequences of infertility as well as a preventive to divorce and prostitution to which childlessness and polygamy so often lead.

But even this more positive practice has its own evils. In the culture that practices it (or used to practice it), the second wife is seen as the wife of the first wife so to say, because she arranged for her, even most probably arranged for all the financial costs in the name of her husband; but above all she chose the second wife because after all due personal inquiries and observation of the incoming new wife, the first wife believes she can live in harmony with her. Unfortunately, in many cases of this sort, the second wife plays more of the role of a servant to her husband's first wife. But the servile harmonious good relationship between the second wife and the first wife does not always last, and even where it lasts, such a servile-marital relationship seems among other things in discord to the unity and equality of relationship that marriage calls for.

In addition, a man who is considering polygamy or IVF/ET in terms of their costs, should not only consider the cost of marrying another wife, but also the uncertainty of marrying another infertile woman together with all the sufferings involved for himself and the new wife. For the practice of polygamy is not a guarantee of fertility and offspring.

Since infertility in marriage can also be caused by some reproductive deficiency on the part of a man, including chromosomal aberrations, or defective sperms which may be responsible to series of spontaneous abortions which leave a woman childless, then a husband who is the direct source of childlessness in marriage is not always immune from the negative consequences of his reproductive incapability. The negative psychological (guilt, shame, depression, feeling of worthlessness) impact which a woman awareness of her infertility has on her, especially when it has become public knowledge, are replicated on the husband when he is the direct source of childlessness in their marriage. But the result is even worse on a man if his wife decides to pursue the good of bearing a genetic child and so also to escape the stigma of infertility. In most cases of this sort the consequence is divorce.

For while a husband may not divorce his first wife if she is infertile, a woman can divorce her husband if he is the sole source of their childlessness. The reason behind such non-reciprocal behavior is that Nigeria is a patrilineal society. This means that a woman cannot marry another man without divorcing or separating from her first husband because for reasons of lineage within society, polyandry is not practiced in Nigeria. The only way such a wife can bear her own child/ren is if she divorces her infertile husband and marries another man, or if she begets

a child/ren extra-maritally. Thus, in Nigeria the wife of an infertile husband may go out and have a sexual relationship with a man outside of or even within the local community in order to have a child. Or as Mbiti says: "Where the husband is impotent or sterile, his 'brother' can perform the sexual duties and fertilize the wife for him, and thus save the marriage from breaking down" (1969:145).⁹ In this situation, as in the case described above where the husband preserves his own lineage by marrying and bearing a child/ren by another woman, so does the wife (so to say) preserve her own lineage by bearing a child with another man, though not from her legal husband.

Obviously, when childlessness causes a divorce or separation, the unity between husband and wife is automatically broken. Here again, the theme of the indispensable role played by procreation in Nigerian marriages, and the irreplaceable value of children in the Nigerian culture, is demonstrated by the woman's behavior (divorce or separation) in pursuit of this good/end (child). But there are evil in the practices just discussed as well. When a wife leaves her husband for the known reason that he is infertile, the husband and his family members are humiliated and exposed to shame. But this is not all. The humiliation and shame to which the husband and his family

. The moral implication of this quotation will be addressed shortly.

are exposed has a long term negative effect on them because the husband will never be able to marry again. For in Nigeria, marriage involves the whole community. Mutual inquiries are instituted regarding the character and values of a man and a woman, along with their families, who seek to be in marital relationship with each another. This means that the man's inability to fertilize a woman or other problem of infertility will be exposed to another woman and her family members whose hand may be sought in marriage.

Therefore, the psychological pain will therefore also fall on members of the husband's larger or extended family when the wife divorces or separates from her husband. Given what was learned in the section of psychological harm in Chapter Four, it seems clear that, in general, this has a much more long damaging effect than knowledge by a child that he/she is a product of IVF/ET would have on him/her.

In Nigeria, a child who is a product of adultery, has at least two major issues which may be sources of psychological problems to him/her. The first is that he/she is faced with the problem of resemblance. The second is that he/she will face the problem of genealogy/lineage. "From where comes this child who neither resembles his father or his mother?" is typical of the kind of questions members of the community ask, especially if the child is a male in which case there is evidence through lack of resemblance that the infertile husband is not the father of the boy.

This kind of a situation can create a lot of stress and psychological problem of identity for the child, who may latter learn the conditions surrounding his conception and birth. Also, the husband may not be happy with the knowledge that he is not the father of the child. The situation can present a crushing feeling of emptiness or incompleteness, shame and worthlessness with reference to his incapacity to have his own child through conjugal act.

The atmosphere in the household, is one of uneasiness, especially where the husband and wife are not in agreement with each other about the method of the conception of the child. The conception of a child due to adultery of the kind being described, sometimes ends up with the woman simply leaving or divorcing her husband; in order to marry the man responsible for her pregnancy. As Mbiti writes: "In the African situation what constitutes a divorce must be viewed against the fact that marriage is a 'process'. In many societies that 'process' is complete only when the first child is born, ... (1969:145). This simply means that a marriage is insecure, and is most likely to break up if no child is born within a certain period of years.

An additional evil of the practice of polygamy in the specific instance where the wife/woman is the reason for childlessness is that, it is heavily prejudiced against married infertile women in favor of men. For, while the practice permits men to marry other women in order for them

to satisfy their desires for children, it does not permit women to satisfy similar desires on their part. In this way it leaves the genealogy issue incompletely attended to because it is helpful only to the men. Ancestry may be maintained for a man and his second, or third wife, it is broken for his first wife. The question that arises in all of the above benefits and harms of polygamy as a means of bypassing infertility, is whether polygamy is a better alternative to address the problem of childlessness than IVF/ET?

A clarification of Mbiti's citation above is important now. Mbiti's presentation of the need for one's brother to impregnate his wife in order to preserve the marriage from breaking down, may lead a non-African the wrong impression that incest is a welcome practice in Nigeria. It is not. But the value and need for a child could compel a woman to engage in otherwise morally prohibited sexual behavior such as Mbiti described, even though that kind of behavior is severely punished as well. For, just as infertility is a sufficient reason for divorce, adultery within or outside of the community is also sufficient ground for divorce. In this connection M. Angulu Onwuegeogwu writes: "The most common grounds for the divorce of a woman are: real or assumed barrenness; ... acts which bring her into public disrepute; adultery with a kinsman" (1975:91).

However, when the issue is infertility where the man is the reason for childlessness, most men allow their wives to bear children for them through adulterous practices. The reason for such a permission is that no man in Nigeria would willingly submit to public knowledge of impotence or infertility on his part. The notion of a man's inability to bear a child is without exaggeration, one of the most humiliating of all humiliating issues for a Nigerian man. It would be preferable to a man to divorce his wife or instead to permit his wife to bear children through adultery than to acknowledge that he is incapable of bearing a child. Nigerian culture, as indicated, sees a marriage as empty if it does not produce children and this cultural judgment does not exclude the Catholic segment of its population who are infertile.

When one compares the very limited benefits and all the evils following from polygamy as described here with the risks and great benefits of successful IVF/ET one finds a marked difference. The major issues involved are firstly, to bear a genetic child and secondly to safeguard unity in marriage. It is obvious that polygamy is incapable of actually assisting the childless couple to bear a child of their own genes without another woman when either the wife or the husband is the source of childlessness. Polygamy extends the family, but leaves key parts of the value of

lineage and continuity unaddressed, and brings many evils as well.

But when successful, IVF/ET is able to help the couple to bear their own genetic child/ren when either or both of them are contributors to childlessness. In this way, the issue of dissociation arising from divorce, and the further social evil of prostitution which arises from it are guarded against, and unity of spouses as well as social health are preserved. In addition and more importantly, the child that is born preserves both the lineage of his/her parents and his/her own proper parental identity. In other words, the child will not suffer from any psychological problem arising from lack of real knowledge of his/her biological identity as the child born of adulterous relationship would.

Firstly then, it was already discussed that the overall good to the parties involved - parents, the larger society, the child born, and posterity, in the means of IVF/ET outweigh all the negatives of this technology. But the practice of polygamy involves more evils than benefits. In allowing a husband to marry another wife to bear a child polygamy does not fully consider the good of his first wife nor the good of society, nor that of posterity, but only the husband's own point of view. Such a means also encourages the variety of serious evil consequences embedded in polygamy. Those evils - divorce and prostitution, cause

social ill-health that are harmful to individuals and society.

Their negative impact on society as a whole outweigh the good brought about by polygamy, because this particular good - the child, will eventually suffer the harm produced by this particular means. This argument holds also for a woman who is considering to divorce her husband on account of infertility and marry another man in order to have a child.

In view of the various facts shown by the analysis of the competing alternatives to IVF/ET, some conclusions become obvious. IVF/ET has an overwhelming advantages over the other competing alternatives. (1), it is able to help some infertile couples to reproduce their own genetic children while some cannot, as was seen in the examination of IVF/ET versus "adoption" and "acceptance of infertility ..." (2), IVF/ET is a better alternative to surgical reconstruction of the oviduct and other surgical procedures because it is much more comprehensive of the variety of infertility conditions it can sometime bypass to produce children than this alternative which is limited in its scope. (3) It is a superior alternative to polygamy because it is able to preserve the genealogies of both spouses and prevents unnecessary social evils that are damaging to social life as a whole.

In all of the above, what is suggested is not that IVF/ET should replace any or all of the alternatives because IVF/ET is not perfect, just as the traditional means of human conception is not perfect. There may be situations that may allow the use of any of the other alternatives instead of IVF/ET although the evils of polygamy are considerable and the most difficult to justify (with reference to IVF/ET). For example if a couple decides that they are better off adopting rather than using IVF/ET to bear and raise children, then in that specific instance it would be more beneficial to them all things considered to use that method than to employ the services of IVF/ET. This is to say that the availability of more than one option to an infertile couple to have a child, in order to lessen the amount of suffering or harm involuntary childlessness imposes on them, makes each of the available means of human conception and methods of bypassing infertility complementary to one another.

Therefore opponents to IVF/ET are not justified in condemning IVF/ET as immoral on the basis that it is fraught with more harm than the other suggested alternatives. For the investigations of this chapter have shown that this technological procedure is in fact superior to the other alternatives in terms of yielding more benefits and incurring less harm when the whole human good is considered.

CONCLUSION

This dissertation has made a carefully focused consequentialist/proportionalist philosophical examination and critique of CDF's deontological philosophical arguments on the morality of IVF/ET; and applied the findings of this critique to the Nigerian cultural framework. Both CDF's position and this dissertation's are two different interpretations of Thomas Aquinas' on natural law morality.

Chapter One set the scene of the arguments of this dissertation by reviewing the biological presuppositions of, and then the general arguments about IVF/ET focusing on homologous IVF/ET. Chapter Two provided a philosophical background for a proper understanding of the meaning of natural law. Chapter Three provided a more precise ethical philosophical foundation for CDF's document against IVF/ET; gave a textual exposition of CDF's arguments, and showed that CDF's main deontological argument is fundamentally flawed. Chapters Four and Five take a consequentialist or proportionalist approach to the morality of IVF/ET, basing their reasoning on value assumptions about children that CDF itself accepts. More precisely Chapter Four examined the risks and harm and benefits of IVF/ET, and showed that, in general, the practice of IVF/ET yields more goods than harms for those involved, especially in a culture like Nigeria. A comparison of IVF/ET with other alternatives was the subject matter of Chapter Five. In each case, it was shown that

IVF/ET in general yields a better balance of good over evil than the other alternatives (adoption, surgical reconstruction of the oviduct and other surgical procedures, acceptance of childlessness together with the development of other avenues towards leading a worthwhile fulfilling life, and polygamy). For example, (1), it is able to help some infertile couples to reproduce their own genetic children while some cannot, as was seen in the examination of IVF/ET versus "adoption" and "acceptance of infertility ..." (2), IVF/ET is a better alternative to surgical reconstruction of the oviduct and other surgical procedures because it is much more comprehensive of the variety of infertility conditions it can sometime bypass to produce children than this alternative which is limited in its scope. (3) It is a superior alternative to polygamy because it is able to preserve the genealogies of both spouses and prevents unnecessary social evils that are damaging to social life as a whole.

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By properly articulating the natural law philosophical argument on which CDF bases its deontological arguments, giving them careful critical philosophical examination, I hope that it will be a genuine contribution to scholarship as well as an open door invitation to more careful scholarly discussion of CDF's position without its ecclesiastical aura.

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DISSERTATION APPROVAL SHEET

The dissertation submitted by Fr. Joseph Ibegbulem Ekweariri has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is, therefore, accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

4-24-97

Date

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