Genetic Engineering: Reprise

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Another criticism is that the Directives deal too much with the problems of sex, and not sufficiently with the broader and more significant questions of "who shall live" and "the quality of life." Yet of the 13 specific directives, only 5 deal directly with the use of sex, 11 deal with the protection of life and 16 deal with the quality of life.

Let us be honest enough to acknowledge that the problem of the Directives is not so much one of sexuality as of Ecclesiology. The point of contention is not so much what the Church teaches on the question of sex — because that is perfectly clear — the point at issue is rather: "Should Catholics go on believing it?" — and there precisely is the crisis of faith.

In summary, then, the basic issue is faith in the Church, in its teaching with regard to contraception (and contraceptive sterilization) in our Predominately contraceptive pluralistic society today — with abortion looming ever larger on the horizon.

The authentic, official, recent as well as traditional, and repeated teaching of the Catholic Church is that these practices are moral evils. The Second Vatican Council left that teaching undisturbed and made provision for its re-affirmation in the Encyclical Humanae Vitae. The Encyclical appeared, and the Bishops of the entire Church reinforced it.

There are more than a few Catholics today who simply do not accept this teaching. That is damaging enough to the Church — to the faithful of Christ. But the worse danger and damage is in priests and theological writers using their authority and prestige to say that this is not really the teaching of the Church; or, if it is, that Catholics need not accept it; or that it doesn't really mean what it says; or that the Pope and the Bishops are incompetent and so need not be listened to — because they do not understand the new Ecclesiology or the new morality — which is to say that they do not know either the nature or the function of the Catholic Church.

If we would close with a prayer, that prayer should be the twentieth century plea of the Lord Jesus, to His eternal Father, as He renewable His Sacrifice on the altars of our contemporary world: "Strength en, in faith and love, Your pilgrim Church on earth."

This is a prayer that really says it all. The road ahead — for the Catholic Hospital — partly supported by public funds in a pluralistic, and to a great extent, contraceptive and abortion-oriented society — is fraught with dangers to its corporate endurance, and even continued existence.

The pilgrim road ahead will require great reserves of strength, and faith, and love. But if faith fails — faith in the Church as the authentic on-going Galilean ministry of the Lord Jesus — bringing His redemptive love to today's troubled world — if that faith fails, then our attempts at love will bring to others more harm and hurt — than wholeness and healing and good. ☞

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M. Therese Southgate, M.D.

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We commend to the special attention of our readers an article by Paul Ramsey, PhD, on some of the ethical considerations in artificial reproduction of the human species, or broadly speaking, genetic engineering. In part 1 of this article (p 1346) Doctor Ramsey considers the medical ethics of in vitro fertilization or, as popular parlance has it, the "test tube baby." (This latter term is, however, not strictly correct as will be noted below.) In part 2 of the article, which will appear next week, Doctor Ramsey answers objections which might be raised to his statements and also develops some of the implications for genetic engineering in current embryologic research.

Before examining some of the issues, it is perhaps important to define some of the terms and procedures which are subsumed under the broad umbrella of "genetic engineering," but which are frequently confused, as well as noting the
The popular term, genetic engineering, might be considered as covering anything being done with manipulation of the genes of the fetus for whatever purpose, from conception other than by sexual union of two persons, to treatment of disease in utero, to the ultimate manufacture of a human being to exact specifications. It has nothing to do with the "creation of life"; it is concerned only with the methods for transmitting life.

Thus, the earliest procedure in genetic engineering might be considered to be artificial insemination, or the laboratory introduction of sperm (usually, but not necessarily, the husband’s) into the woman’s body with the intention that fertilization of an ovum will occur. This practice is relatively widespread today and utilizes not only freshly acquired sperm, but sperm which may have been stored for indefinite periods of time (frozen-sperm banks). The next procedure in point of logical development is artificial conception, or in vitro, fertilization, ie, union of sperm and ovum outside of the human body, “in the test tube.” This has been accomplished in the laboratory with human sperm and ovum and the resulting zygote has developed in the test tube through several divisions, at least to the embryo stage of blastocyst.

The next step logically is, of course, artificial implantation into a uterus, since the blastocyst stage is when the embryo normally needs a uterine environment for continued development. This has been accomplished in laboratory animals with the birth of some apparently normal offspring, but not yet in humans (the latter "failure" owing largely, we suspect, more to the fact that as yet we understand little about the process of implantation than to the fact that no one has been willing to try it without at least some chance of “success”). It is with these latter two procedures that Doctor Ramsey is chiefly concerned in the first part of his article.

Yet in the future, but following the same stepwise logic, are procedures which are commonly identified more sensationally with the term genetic engineering: ectogenesis, or total extracorporeal gestation of a fetus to term and “delivery” by reproducing the uterine environment in a test tube (this is properly called a “test-tube baby,” although in the popular media artificial fertilization is often referred to as such), cloning (already accomplished in frogs), in which the nucleus of an ovum is removed and replaced by the nucleus of an asexual cell, eg, a skin cell, with the production, of course, of a being genetically identical to the donor of the nucleus (two observations can be made here: one is that whereas sex without procreation has always been possible, cloning makes possible procreation, or more accurately reproduction, without sex—a totally different and most serious human consequence; the other is that the only persons essential to preservation of the human species will be carriers of mature ova); production of chimeras, or the grafting of cells from one or more blastocysts to another blastocyst, perhaps to correct defects in the original blastocyst, the “parents” of the several blastocysts being the same or different in each case; and finally, and what is popularly meant by genetic engineering, the production—or better, the biological manufacture—of a human being to desired specifications. Doctor Ramsey considers some of the implications for the future in the concluding portion of his article next week.

And why our concern about these matters? Why be concerned about genetic manipulation when at least some of its results will be good for the individual fetus, eg, detection and treatment of disease in utero? Why be concerned about procedures which have provided infertile couples with children, or which have made it possible for male sterilization to be "reversible"? Why be concerned about futuristic procedures which may seem so preposterous as to be impossible of accomplishment?

Doctor Ramsey discusses well the reasons for concern from the standpoint of what he terms “received medical ethics.” Others have been equally thoughtful and have raised additional issues. Popular concern, in contrast, usually voices more obvious and sensational problems, for example, the raising of the so-called intelligence quotient or the fear that politicians will preempt control of the species to nefarious ends. These are hardly serious concerns at this moment, however, nor will they perhaps ever become so, precisely because they are so obvious. In other words, such practices as cloning or the biological manufacture of a human being are (already, at least several giant steps away and as such are readily rejected as being unethical, immoral, or impossible precisely because they are as yet in conflict with our culture. The change from the present is too drastic to admit into our perceptions of reality.

Rather, of graver concern today should be the ready acceptance by many of the first steps we are taking in divorcing procreation from human sexual union, ie, artificial insemination and in vitro fertilization, and the cultural conditioning we thereby undergo to accept the next small logical step as even better. Our concern thus is with this much more subtle danger—that of conditioning. It is the graver danger precisely because it is not easily evident. For example, we accept artificial insemination as a good because its immediate, seen result, relieving childlessness, is “good.” We are thus conditioned, at least culturally if not ethically or morally in all cases, to accept the next logical step, artificial fertilization, without too much questioning beyond our establishing the fact that ultimately research will bring it to the same “good” end. Not asked are two corollary questions: (1) Have we a right to satisfy by any means whatsoever our legitimate desires, even our needs? and (2) What are we doing to the act in which human procreation takes place?

Human procreation ought to be...
an act involving the total human person. It is a human act, as Kass has noted, precisely because it engages two people physically and spiritually, and not merely rationally, as is a laboratory procedure.

With artificial insemination we have already de-humanized the act involved in conceiving a human being by making it a merely rational act. Procreation thus becomes reproductive, a word borrowed from the laboratory, but now established in our daily usage.

Perhaps, too, medicine, and especially the area of research, ought to reexamine itself in terms of its public relations. Perhaps we bear no small share of the blame in causing a demand for the realization of even legitimate desires by overselling our wares or distorting our true task. For example, the unfortunate word "cure," and by implication "satisfaction" and "happiness" as well, has crept into the language when we really mean "treat." In truth, we have no rose gardens to promise.

Obviously, we must examine more than the end result of our actions. Otherwise we will be conditioned gradually so as to eventually forget what is human. Obviously, too, this is a complex and ongoing process of examination and decision. We must not lose the benefits of research out of fear. Mistakes will be made in our decisions. But we will retain and grow in our humanity if we look beyond the immediate "good" to what will allow us to reach our full measure of dignity as physical, rational, and spiritual persons, not reproduced or manufactured, but "called into being." As such, human procreation is a mystery, and not a problem. Whereas given enough money and time, one may solve virtually any problem, mysteries can only be contemplated.

Given the intricacies of the human mind, we doubtless possess the potential for reproducing someday, to exact specifications, a human person. But should we? Should we have even taken the first step?

REFERENCES


Dr. Cavanagh sets the stage with a preliminary discussion of various schools of psychotherapy in the first of a two part "History of Psychotherapy" to be published in the Linacre. The second part of the history, an in-depth look at the history of hypnosis will appear in the November issue. That issue will also include Dr. Cavanagh's extensive bibliography for the two parts of his article.

This issue of the Linacre Quarterly deals with the morality of psychotherapy. As a preliminary to this discussion, it is important to know something about the various schools of psychotherapy. The most popular of these schools was that of Freud. As a consequence, more time will be spent on Freud and less on the other schools.

Until Freud developed free association and dream interpretation, his main therapeutic instrument was hypnosis. Not only did Freud use hypnosis, but many of his contemporaries did also. Although hypnosis cannot be considered a school of psychiatry, it was so important to all schools that I believe it should be described. For this reason, hypnosis will be briefly described in this first section of this history and considered in length in part II in the next issue of the Linacre.

Although the history of psychiatry is full of well-known names such as Benjamin Rush, Tuke, Pinel, Esquirol, Falret, Mesmer, Charcot, and others, no notable contributions to the psychodynamics of mental disease were made before the time of Freud. Breuer. Prior to that time, the treatment of the mentally ill was largely a matter of custodial care although numerous studies had been made of hysteria.

Breuer: Modern psychopathology may be said to have had its origin in the work on hysteria of Joseph Breuer. Breuer, as a result of his studies with hypnotism, was led to believe that neurosis had its origin in a failure to express the effect of past mental trauma. He taught that the affect had been suppressed but came forth in the form of symptoms, and that the condition could only be relieved by hypnotizing the patient, bringing about a recall of the initial trauma and at the same time helping him to abreact (work off) the associated emotion. Breuer's work would have received little attention except for his association with Freud, whom he had met in Bruche's laboratory where Freud was studying prior to the completion of his medical degree.

Before Freud had gone to Paris in 1885, Breuer had discussed with him the case of hysteria in a young girl whom he had studied by means of hypnotism and which had revealed to him new concepts as to the causation and significance of hysterical manifestations. This discussion marked the beginning of the development of Freud's system of psychoanalysis.