

Being Moral in the Brave, New World: *Human Cloning, Genetic Engineering, etc. – Ethical Considerations*

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The Problem with Embryos!

A human embryo is a clump of cells. One can stop with that description, and some prefer to do so. More often than not, however, they will do so as a particular philosophical stance – as their own response to the ethical problems that manipulating a human embryo engenders.

The Constitution of the Republic does not make things any easier for us in regard to embryos. *Article II, Section 12* announces the State's recognition of the "sanctity of family life" and its resolve to protect the life of the mother and the life of the unborn from conception". The fundamental law of the land does not consign by zygote, the blastocyst or the embryo to legal oblivion. It directs its protection by the State, describing it quite provocatively as "the life of the unborn"!

Let us take a "case study" whose every heading already provokes inquiry: "Human Cloning, Cell-Line Development, Gene Therapy, Genetic Engineering and Patenting of Genes" For many,

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the items are new, but what raises eyebrows is a novel, even unlikely combination of otherwise familiar terms: “patenting of genes”. *Can genes be patented? Should they be patented? Should they even be up for patenting?* Human genes have an almost mythical magnitude far us – their minuteness notwithstanding – because we have some familiarity with them as the key to human traits, as somehow crucial to and determinative of our beginnings.

There is something reassuring, however, about our reticence and circumspection towards the embryo – and towards the minute and the microscopic that the recent monumental accomplishment of genetic science – the genome project – links with much of who and what we are. Our humanity does assert itself when poised over zygote, gamete, chromosome, gene or DNA strand with the awesome capability bio-technology today bestows we pause and ask ourselves questions that have recurred throughout human history: *Can we? May we?* It is a comforting thought that our brave, new world continues to be a respectful world!

Pedro, Maria and the child they could not have...

Informed by their obstetrician that Maria was incapable of conceiving, the young couple was devastated. All the pent up frustration and anxiety took its toll on their marriage. This for me is more than just an introduction to the problem for study. This is where the problem starts! It is certainly right for the couple to want to have a child. In fact it is when one or both refuse to have one that there arises a moral problem. But what does longing for a child entitle one to do?

While on summer study at the University of Cambridge a few weeks ago, I was introduced to a book of John Harris, the Sir David Alliance Professor of Bioethics at the University of Manchester. He is associated with publications on bioethics of the University of Oxford, but such is the confidence of Oxbridge in each other’s excellence that they can without misgivings refer to each other’s professors and experts. Harris, it seems, is among the first authors to deal with our concerns quite accommodatingly. He writes:

One reason for this (the “unproblematic” nature of deciding to carry a pregnancy to term) is the great attraction of having children. Without commenting on the rationality or indeed

on any other element in the cogency of such a desire, there can be no doubt that having children is almost universally acknowledged to be one of the most worthwhile experiences and important benefits of life. This is perhaps why people do not usually think that there might be any necessity to justify their decision to have children or to explain why they have chosen not to have an abortion.²

Quite obviously Harris believes that wanting to have a child is not self-justifying, and that it can be wrong, under certain circumstances, to bring about human life. In fact he devotes an entire chapter (Chapter 4, "The Wrong of Wrongful Life") to a discussion of the circumstances under which it is morally reprehensible to bring about human life. I will not get into this discussion except to join him in the position that wanting to have a child – as well as refusing to have one in circumstances such as conjugal life – stands in need of moral justification. Another way of putting this is to refuse to find in the desire to have a child the entitlement to one! There is much to commend the position that Catholic ethics takes.

The desire for a child gives no right to have a child. The latter is a person, with the dignity of a "subject." As such, it cannot be desired as an "object." The fact is that the child is a subject of rights: the child has the right to be conceived only with full respect for its priesthood.³

It then follows that when the morality of such procedures as *in vitro* fertilization or even *human cloning* is challenged nothing is resolved by the argument that such procedures respond to the desire of otherwise childless couples – or individuals – for children.

We are told by our hypothetical that Pedro vehemently opposed Maria's plan to avail of cloning technology, and that Maria nevertheless proceeded to have her way. This, for me, is no mere literary embellishment of this piece of fiction. It usefully brings home the crucial point that decisions about the conception and birth of new human life are made in the context of conjugal relations between

² John Harris, *Clones, Genes and Immortality: Ethics and the Genetic Revolution*. Oxford, Oxford University Press, 1998. p. 69.

³ Pontifical Council for Pastoral Assistance to Health Care Workers, *Charter for Health Care Workers*, no. 25 The Vatican, 1994.

persons. There is in fact a danger that in discussing the technology of *in vitro*, fertilization, cloning, intra-uterine gene therapy, and related issues we abstract them from the human context in which they commonly – one can justly say “naturally” – arise. I strongly submit that one relevant consideration is what has been referred to as “family morality”: the special personal obligations an individual has towards his offspring which he does not have to other persons.⁴ It was as a married woman that Maria desperately wanted to have a child – as desperately, it appears, as Pedro, her husband, but while he had misgivings about cloning and was indeed vehemently opposed to this mode of intervention, Maria had no compunctions whatsoever. She quite clearly disregarded her obligation towards her husband and towards her family, and proceeded to act as she had planned.

I think we can all agree on the common ethical premise that *capacity is per se not a title to permissibility*. Between “I can do it” and “I may do it” is that divide known as morality or ethics. To deny this premise, it seems quite clear to me, is to deny any vitality and relevance to the ethical. Agreeing on this is significant, for there are some who will not allow their excitement over the vast possibilities offered by bio-technology to be tempered by ethical questions. This having been said we at least open ourselves to a discussion of issues that would otherwise be foreclosed were we to make of capacity itself moral title!

As early as 1982, Gerald Rubin and Allan Spradling of the Carnegie Institution in Baltimore successfully introduced into the embryo of a fruit-fly specific genes they wanted introduced. Using transposon – a segment of DNA that moves around within the chromosomes – they modified the chromosomal structure of the fruit fly so that the modification would be passed on to subsequent generations.⁵ From fruit-fly to human embryo is quite a long way, but Dolly – who regrettably had to be put down by her own creators” – dramatically proved just how short for science a “long way” can

⁴ Francis Bekwith, “Personal Bodily Rights, Abortion, and Unplugging the Violinist”, *International Philosophical Quarterly*, XXIII:1, Issue No. 125 (March, 1992), pp. 105-118.

⁵ Andrew Varga, *The Main Issues in Bioethics*. New York. Paulist Press, 1984; pp. 131-134.

be! When we shall have developed the technology for genetically re-engineering the human embryo, will the emergence of such a technology by itself entitle us to use it?

Maria will presumably argue that she was merely asserting her right, and it might be reasonable to agree that she does have some right(s) she can invoke to explain why she rode rough shod over her husband's objections. But this is exactly the point of Louvain philosopher Frans de Wachter:

[...] one can demonstrate no that the respect for human rights offers an inadequate starting point for bioethical problems. First, problem situations in this sector are mostly conflict cases where the language of rights can point indecisively in all directions (right to life as opposed to right of self-determination, and so on). Each party can invoke his 'own' human rights, as his partisans advocate. Second, other elements have to be included in the consideration: obviously, there is the common good the community, but there are also entities that are brought into play by modern techniques and do not coincide with the 'persons' about whom human rights are concerned ("the species or the genetic structure, the embryo, the person kept alive vegetatively, the coming generations). Human rights are a decision, an attitude, a relationship, a language, a way of seeing things. They are not a solution for miscellaneous problems.⁶

Even if we agree with Maria that she does have a right to have a child, and that scientists have the right to proceed with experimentation and research wherever their findings may lead them, this settles nothing and we are left with the problem of whether it was right or not for Maria to do what she did in the entire context within which everything happened, for all human acts and the issues arising from them are context-bound.

Cloning and *in vitro fertilization* are problematic and we are right in pursuing the question of the permissibility of putting them in the employ of engendering new human life. And the problem remains even if it is alleged that these technologies make possible

⁶ F. de Wachter, "Ethics and Human Rights" in *Tradition and Renewal: The Centennial of Louvain's Institute of Philosophy*, Volume I. Leuven: Leuven University Press, 1992, pp. 95-112.

children the childless would otherwise not have but desperately desire. It remains even if we can successfully argue the right to have children, and the right of scientists to science.

Pedro and Maria as husband and wife figure prominently in the debate – insofar as Catholic ethicists are concerned for to them “nature itself dictates that the transmission of human life be a personal and conscious act.” By “personal act” is meant “the intimate union of the love of the spouses who, in giving themselves completely to each other, give life” so that the union of spouses and procreation become “a single, indivisible act, at once unitive and procreative, conjugal and parental.”⁷ That this position is Catholic is neither an argument against it nor indeed for it. It is however reasonable first of all to distinguish the production of a device or an object from the conception of a human being, from the emergence of new human life. The whole of the Revised Penal Code attests to the elementary distinction we make between human and non-human, and the consequences of action directed at human beings. Dressing chickens and frying them for Sunday lunches is to most for whom cholesterol is not a sensitive issue an activity full of gustatory promise; the prospect of doing the same to human beings can only fill us with revulsion! Second, it is as reasonable to be directed by the order of things, by “nature.” I do not think it is necessary to plead guilty to what G.E. Moore called the “naturalistic fallacy” – the fallacy of reducing moral prescriptions to laws of nature – in order to be reasonable in this respect. Nature does give us some instructions. Our lungs flourish on clean air, and so it does not seem ethically permissible to smother them in cigarette fumes. The human infant is among the most helpless and vulnerable of animal young, therefore the human parents have the obligation of care and succor towards the child. Human life emerges from the union – properly characterized as “personal” – between a man and a woman, therefore it ought not be transferred to a production line! This is of course merely another way of insisting on the “dignity of the human person.”

It is then my position that it is morally objectionable – or in the very least, morally questionable – to make of the conception

⁷ *Charter for Health Care Workers*, n. 21.

and birth of a human being the production of a thing, engineered and manipulated by third persons, and transferred out of the context of the conjugal act into impersonal locale of petri dishes and test tubes! The gratuity of a child – the fact both physical and psychological that conception comes as a gift – is not an adventitious issue. It pertains to the heart of the distinctiveness of the human person. Then too there is the important point that something is morally owed the child in this respect.

A child has no rights before it is conceived, but once conceived it has a natural right to that intimate relation to its parents which arises from the fact that they are its biological parents by intercourse within marriage, an intercourse that fully expresses their mutual love. The adopted child, although far better off than an orphan, still lacks the complete implementation of this natural right, as is apparent from the many cases of adopted children who, despite the great love shown them by their adoptive parents, are extremely anxious to locate their biological parents. The child begotten by AID (artificial-insemination-donor) is deprived of this relation with one of its biological parents. Even the child begotten by AIH (artificial-insemination-homologous) or *in vitro fertilization* is deprived of the fullness of this relation, since he or she is not the fruit of an act of love but of a technological procedure. This human right obliges parents not to bring children into the world except in a way that endows them with this intimate relation to their parents. Children commonly fear that they are really adapted and thus may be someday rejected by their 'parents'. When it becomes routine for children to be produced in one of these artificial modes all children may wonder if they really have parents, or were begotten by unknown fathers, or manufactured in a laboratory.⁸

A Unicellular Person?

"After a cell nucleus was extracted from Maria's skin tissue and inserted into an egg cell that had already been denucleated, the resulting zygote or fertilized egg began to divide." The rest of the hypothetical suggests that not everything went well, for later on, prodigious amounts of a previously unknown – fictitious – protein

⁸ Benedict Ashley and Kevin O'Rourke, *Ethics of Health Care*. St. Louis: Catholic Health Association of the United States, 1986, pp. 134-135.

– “Rejectin-1” – manifested themselves in the hair follicles of Carmina, the resulting child.

Cloning and *in vitro fertilization* obviously open a wide gamut of possibilities including the now well-known, intensely debated enterprise of stem-cell research. The pluri- or totipotentiality of embryonic cells is now commonly known. There is then the prospect that neural defects and brain degeneration – including the dreaded Alzheimer’s disease – may be arrested by the transplantation of embryonic cells. But of course these cells must be harvested first, and harvested, quite obviously from an embryo that will presumably be destroyed in the process. Likewise possible is the deliberate culture of embryos to provide for cell or tissue-parts. Biotechnicians would then deliberately fertilize eggs or culture clones, allow them to mitotically divide and to develop into a cell-mass or towards more advanced embryonic stages and from them harvest the cells or tissues necessary for Therapeutic purposes on others.

Then too there is the possibility of deliberately inducing the twinning of an embryo and using one to test for genetic abnormalities that might be present in the other, with the resulting destruction of the embryo tested.⁹

These possibilities are cause for concern because of the status of the zygote and the embryo. While the question of constitutional law – “What protection is it that is guaranteed the unborn child from the moment of conception?” – does not necessarily translate into the ontological question – “Is the zygote a human person?” – they do arise within the same conceptual milieu. I find it necessary to dispose of a tangential matter: Do Articles 40 and 41 of the Civil Code resolve the question of personality vis-à-vis the unborn?¹⁰ The answer must quite clearly be in the negative, for all that the

⁹ Many of these possibilities are presented in Chapter 1 of Harris, *op. cit.*, pp. 24 et seq.; see also Varga, *op. cit.*, pp. 109 et seq.

¹⁰ Art. 40: “Birth determines personality; but the conceived child shall be considered born for all purposes that are favorable to it, provided that it be born later with the conditions specified in the following article.”

Art. 41: “For civil purposes, the fetus is considered born if it is alive at the time it is completely delivered from the mother’s womb, However, if the fetus had an intra-uterine life of less than seven months it is not deemed born if it dies within twenty-four hours after its complete delivery from the maternal womb.”

Code is concerned with is “personality” for purposes of the rights and obligations set forth in the Civil Code. There is no logical repugnance to the hypothesis of the enactment of a law that recognizes the embryo as the subject of personal rights, such as the right to be respected in its bodily (or cellular) integrity. Attention should also be paid to the quite important fact that these particular provisions of the Civil Code do not fix a *terminus a quo* for human personality, although they make its recognition dependent on subsequent conditions. That the aforementioned provisions are archaic is also pretty obvious. Note that the Civil Code places a premium on birth, and in the case of neonates with an intra-uterine life of less than seven months, on survival for at least one day after delivery. Every physician will agree that all this depends on the medical facilities and the medical competence available in each locality. We have then the curious, if not untenable, situation that personality for purposes of the Civil Code is dependent on the vagaries of economic advancement or privation in different localities of the Philippines.

I propose to re-state the question. The question – Is the zygote a person? – is commonly taken to be the quest for that mysterious mark or character called “personhood” in the zygote. This can only complicate matters. I suggest rather that we ask ourselves the question: “*Do we have compelling reasons to accord the zygote the recognition and the protection of persons?*”

Because it is not my intention in this study to provide a transcript of the on-going debate between the pro-life and the pro-choice camps, I will merely advance what I take to be compelling reasons for responding in the affirmative.

1. “From the time the ovum is fertilized, a life is begun which is neither that of the father nor of the mother; it is rather the life of a new human being with his own growth. *It would never be made human if it were not human already.*” In fact, the “mere probability that a human person is involved would suffice to justify an absolutely clear prohibition of any intervention aimed at killing a human embryo.”¹¹ I borrowed this formulation from an ecclesiastical docu-

¹¹ John Paul II, *The Gospel of Life (Evangelium Vitae)*, n. 60. New York: Random House, 1995; pp. 107-108.

ment and, quite understandably, the problem is couched in metaphysical terms. Unless we are willing to accord the zygote the protection of persons from the inception of its zygotic life, when are we willing to so protect it? Harris advocates what he calls “the gametic principle,” arguing that the true beginning of human life should be reckoned with the gametes.¹² The trouble though with starting with gametes is the simple biological fact that no gamete, even under the most favorable of circumstances, ever develops into a full-grown viable fetus. There must therefore be a moral and a legal significance attaching to the zygote that does not attach to the gametes.

I fully realize that the usual objections against this position are the possibility of twinning – “There may in fact be more than one individual” – as well as the fact that chromosomal abnormalities predominantly lead to wastage from fertilization. The possibility of twinning is the possibility of having two (or more) rather than only one individual. It is therefore no argument against individuality that, from the time of Boethius, has been taken to be one of the requisites of personhood. The argument from wastage leads us to the following position: If because of chromosomal abnormalities, what results from fertilization is a conjunction of haploid cells into a diploid mass that cannot develop into a human fetus, then one has a mass of cells towards which we would withhold the protection we give persons. The trouble, of course, is that most of the time we will not know this, except *after the fact*, and therefore it is the more respectful position to presume that all embryos naturally fertilized are entitled to the protection granted persons.

2. *To withhold the protection accorded persons from the zygote is to become arbitrary about the recognition of human worth and dignity.* Does one reckon with the claim to the protection of a person from the time the “primitive streak” appears and cells become specialized, or when nidation or implantation along the uterine wall occurs, or when the cortex has been formed, or when actual cortical activity commences? The variety of choices already indicates the arbitrariness of postponing recognition of the claim to the protection of a person to a time later than fertilization. While I would prefer

¹² Harris, p. 77.

to avoid the misleading talk of “potentiality” – especially because Aristotle’s notions of act and potency are no longer that clear to us – it is necessary to plead for accuracy in the way we use our terms. From all that can be observed empirically, it is correct to say that the zygote has the potential for maturation as a human adult, and for the activities usually attributed to human persons. There is no justification, empirically, however, for the proposition that the zygote is a potential human person” – with the implication that it is not yet actually one! To say that it is a “potential human person” and make of that an argument for denying it the protection due a person is to beg the question, and quite miserably at that!

Biological individuality, and therefore the personal nature of the zygote is such from conception. ‘How can anyone think that even a single moment of this marvelous process of the unfolding of life could be separated from the wise and loving work of the Creator, and left prey to human caprice?’ As a result it is erroneous and mistaken to speak of a pre-embryo, if by this is meant a stage or condition of pre-human life of the conceived human being.¹³

But that one has the potential for maturation is no reason for denying one the respect and protection to which one is entitled. Are not R.A. 7610 and related laws meant to deal with the short-sighted who do not treat children with the respect and care with which adults are treated?

What sense can there possibly be in referring to an embryo as a person when it is so unlike the persons that we are in several respects? Legally, it refers to the protection that is due the unborn “from the moment of its conception.” This includes but is not exhausted by existing penal provisions on abortion. But there will be plausibility of the legal sense only if there is some tenable intelligibility in referring to the embryo as a person ontologically. I submit that Strawson and Ricoeur – contemporary philosophers of unlike persuasion – provide useful conceptual frameworks.

Strawson links the concept of personhood to the ascription of what he calls “P-predicates”, e.g., is smiling, is going for a walk, is in pain, is listening to this lecture, etc., although it is central to his

¹³ *Charter for Health Care Workers*, n. 35.

system of descriptive metaphysics that for every person, “person” is a primitive concept – a thought irreducible to other thoughts.¹⁴ Quite interestingly, Strawson steers clear of the Cartesian trap by pointing out that we can ascribe P-predicates to ourselves (“I am reading this paper”) only because we have learned how to ascribe – and to learn how to ascribe is to learn how to use the P-predicates both of oneself and of others (I know when to use “is reading” – whether it be “He is reading” or “I am reading”) and in so ascribing them to others, we see others as ascribing them to themselves. If then we say that a person is one who can ascribe P-predicates to himself, it can only be because such a person can equally ascribe P-predicates to others. But P-predicates do not occur in a discursive or existential vacuum. “He is smiling” links up with several other P-predicates and my own acknowledgement and recognition of Peter. Strawson therefore says:

If one is playing a game of cards, the distinctive markings of a certain card constitute a logically adequate criterion for calling it, say, the Queen of Hearts; but, in calling it this, in the context of the game, one is ascribing to it properties over and above the possession of these markings. The predicate gets its meaning from the whole structure of the game. So with the language in which we ascribe P-predicates. To say that the criteria on the strength of which we ascribe P-predicates to others are of a logically adequate kind for this ascription is not to say that all there is to the ascriptive meaning of these predicates is these criteria. To say this is to forget that they are P-predicates, to forget the rest of the language-structure to which they belong.¹⁵

It is my thesis that part of the context of P-predicates is the development of the human person and the way we ascribe P-predicates to others as self-ascribers according to their degree of maturity. I am then saying that our familiarity with others and our competence with P-predicates allow us to ascribe P-predicates to others as self-ascribers in varying degrees. We say of one-year old Peter: “He is upset that his mom didn’t buy him ice-cream” and we realize

¹⁴ P.F. Strawson, *Individuals: An Essay in Descriptive Metaphysics*. London: Methuen and Co., Ltd., 1964; pp. 87-116.

¹⁵ *Ibid.*, p. 100.

that “he is upset” said of a one-year old is not the same as using the self-same P-Predicate of Peter, the provincial governor. That we ascribe P-predicates to infants is quite clear: “He wants his mommy... He is hungry... He is smiling” and in ascribing these to an infant, we take him to be also a self-ascriber, though of different degree from the self-ascriber that an adult is. Lately, thanks to what ultrasound and pre-natal diagnostic procedures allow us to see and to understand, we ascribe P-predicates to fetuses: “It is enjoying its mother’s voice... It is grimacing in pain It is serenely floating around’ as incipient self-ascribers. Our ascription therefore includes as its context the life-history of the individual, from the adult we encounter retroactively to the fetus in the womb, a context that does not seem to include germ cells whether in the testes or in the ovary.

Ricoeur for his part recognizes the significance of ascription (or assignation) to which he adds a most useful contribution: “narrative identity.” Ricoeur contrasts the identity of a person with the immutability of a structure, such as the fixity of a genetic code. A person has a narrative identity, with the result that this identity is mutable. “This mutability is that of the characters in stories we tell who are emplotted along with the story itself.”¹⁶ One’s identity then is the identity of one who is defined by the stories he tells of himself as well as by the stories others tell of him. This of course is part of the thematic of Ricoeur’s three-volume *magnum opus*, “Time and Narrative.” On the triadic structure of narrative identity, Ricoeur writes:

Some may doubt whether narrative identity presents the same threefold structure as do discourse and action. But they are wrong. Life stories are so intertwined with one another that the narrative anyone tells or hears of his own life becomes a segment of those other stories that are the narratives of others’ lives. We may thus consider nations, peoples, classes, communities of every sort as institutions that recognize themselves as well as others through narrative identity.¹⁷

¹⁶ Paul Ricoeur, *The Just*. D. Pellauer, Trans. Chicago: The University of Chicago Press, 2000; p. 3.

¹⁷ *Ibid.*, p. 7.

It is common human experience that among the most delightful of stories are those told of our childhood that I think most will have no trouble drawing back to the time each of us was conceived, a continuity we do not recognize as going back to our mothers' ovulation periods or the puberty of our fathers! Our narrative identity does include then intra-uterine life beginning with conception. It becomes apparent that the trouble with those who deny the embryo or the fetus personality arises from a monolithic concept of identity – the identity of a fixed structure that does not take cognizance of the immutability of narrative identity.

3. By passing the entire ontological debate is what has been referred to as “*the moral obligation to nurture.*” “The human family has obligations, since the newborn is totally dependent on the voluntary acts of responsible moral agents committed to their care. Without such interactions, neither fetuses nor the newborn would survive. In other words, neurological and behavioral factors alone are not sufficient to tell us how we should act towards fetuses and infants (and also seriously impaired adults)”¹⁸ Human beings maintain their populations in existence only for as long as infants and fetuses are nurtured. Inability to perform – whether as one will later on perform as an adult, or as one used to perform when one was strong – does not determine whether or not the obligation to nurture still holds. The obligation, which is brought home to us by the impossibility of human survival when it is disregarded, answers to the fact that periods in that continuum that we call human life know phases of utter dependence on the care and nurture of others.

There then are compelling reasons ontologically to refer to the fetus as a person and, legally, to extend to the fetus the protection and guarantees we extend to each other. It would be extremely difficult, for one, to reconcile a legislative enactment allowing non-therapeutic experimentation on embryos, or allowing the use of embryos as cell and tissue-banks.

There is more than just “sectarian conservatism” then in the admonition of Catholic moral authority:

¹⁸ Alastair Campbell, Max Charlesworth, Grant Gillett and Gareth Jones, *Medical Ethics*. 2nd Ed. Oxford: Oxford University Press, 1997, pp. 83-84.

This evaluation of the morality of abortion is applied also to recent forms of intervention on human embryos which, although carried out for purposes legitimate in themselves, inevitably involve the killing of those embryos. This is the case with experimentation on embryos which is becoming increasingly widespread in the field of biomedical research and is legally permitted in some countries. Although '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 rather are directed to its healing, the improvement of its condition of health, or its individual survival', it must nonetheless be stated that the use of human embryos or fetuses as an object of experimentation constitutes a crime against their dignity as human beings who have a right to the same respect owed to a child once born, just as to every person.¹⁹

Of Genes and Patents

Disappointed as Pedro might have been over his wife's obstinacy and daring, he did cash in on subsequent developments.

I cannot find my way into reconciling the patenting of Rejection-1 in our hypothetical with present Philippine laws on patenting, particularly R.A. 8293.

Our laws adhere to the general precept of patent law that what occurs in nature and is produced by it cannot be statutory subject of patent.

That the gene therapy subsequently devised as well as the vaccines produced to deal with syndromes such as Carmina's are statutory subject matter for patent is clear, although there is an exclusionary clause covering surgical and therapeutic techniques under present patent laws. In the case under study, Carmina's misfortune spawned corporations and business concerns, each vying for patents and licenses.

The moment an open season is declared – expressly or by acquiescence – on the human genetic code, there is no limit to the extent of inventiveness that entrepreneurship may generate, and

¹⁹ *The Gospel of Life (Evangelium Vitae)*, n. 63.

while some developments, particularly those that address congenital, degenerative afflictions are definitely welcome, the ethical challenge is precisely that there is no *a priori* guarantee that all ventures, economically propelled, will be therapeutic. In theory, it might be easy distinguishing between therapy and eugenics, but the economics of scale do not always recognize such fine lines.

We therefore walk a legal and an ethical tightrope. A patent is fundamentally a monopoly, from the point of view of the patentee, and odious as monopolies might be to an economy that professes allegiance to the liberty of the entrepreneur, they are the only viable means of providing incentives to the creative. Unfortunately, creativity can be for good or for ill, and human history provides abundant examples of either.

I will confine myself therefore in this concluding part of my discussion to calling attention to the problems because sensitivity to the dimensions of a problem allows for answers that may be less doctrinaire and rather more nuanced. □