EMBRYO RESEARCH: SOME CHRISTIAN PERSPECTIVES

A report from the Mission and Public Affairs Council

Introduction

This paper offers some reflections on the science, theology and morality of using human embryos for therapeutic research purposes. It draws on previous papers by the Board for Social Responsibility produced for briefing purposes during the late 1990s and early 2000s. It also uses material from the Annual Report of the Ethical Investment Advisory Group, which is currently considering the investment policy of the Church towards companies which engage in stem cell research. Appendix One lists previous Synodical debates on the subject, and Appendix Two lists Board responses to relevant consultations. Deliberately, this paper does not come to specific policy conclusions which, with fast-moving technical developments, can become easily outdated. Rather, it aims to explore the perspectives Christians have brought to the ongoing debate, and to offer a framework of ethical reasoning which will enable a continued contribution in the light of our fundamental convictions about God and the humankind he so lovingly created.

The human embryo and its legal status

2. The human embryo is formed when a sperm penetrates an egg or ovum, fertilising it and merging with its genetic material to form a unique genome. A fertilised egg forms a blastocyst four days after conception, with two types of cell: an outer layer (which becomes the placenta and other

supporting tissues needed for fetal development) and an inner cell mass (the stem cells). If fertilisation takes place within a woman's body, the fertilised egg will travel during the first 14 days of its life to the womb, where it may implant itself. If it is to split and become two (giving rise to identical twins) it will do so within about 14 days, when what is called the primitive streak develops. Once the embryo is implanted, it grows rapidly and forms the fetus, and, ultimately, a fully formed human being. In the normal course of events, about seventy per cent of all fertilised eggs never reach the womb to implant.

- 3. The Human Fertilisation and Embryology Act of 1990, and modifying regulations to that Act passed by Parliament in 2001, permit under strict controls the use of the embryo for research purposes up to 14 days, or the appearance of the primitive streak, whichever is sooner. After this, if the embryo has been the subject of research, it must be destroyed. These embryos will have been created by *in vitro* (literally 'in glass') fertilisation (IVF), that is, outside the woman's body. Normally embryos which are used for research are the so-called spare embryos left over after IVF treatment. Parents' permission must be obtained for such use to be made of their embryos.
- 4. UK law also permits the creation of human embryos by means of cell nuclear transfer, more popularly known as therapeutic cloning. This technique is identical to the technique that would give rise to cloned beings. It involves taking a cell from an adult human, removing its nucleus, which contains all of that person's DNA or genome, and replacing the nucleus of a human egg with it. The egg with the replacement nucleus is 'tricked' into thinking it is fertilised and starts to grow as an embryo. Were it to be placed in a woman's womb it would develop as any other embryo created by fertilisation.

The placing in a womb of an embryo created by cell nuclear transfer is explicitly unlawful, made so by the Human Reproductive Cloning Act of 2001. The creation and use of cell nuclear replacement embryos for research is not forbidden but such embryos must be destroyed after 14 days.

Therapeutic potential of the human embryo

- The inner mass of the embryo consists of stem cells. 5. These cells are what ultimately become all the different cells of the human body, from fingernails to lungs. If they are removed from the early embryo (destroying the embryo in the process) their pluripotency can be channelled in such a way as to grow into whichever cells are desirable from a therapeutic point of view. Currently incurable diseases such as Parkinsonism, Alzheimer's Disease, liver and heart disease etc are all potentially curable by the creation and transplantation of healthy cells specific to the diseased area: neural cells for Parkinson's or Alzheimer's; heart and liver cells for heart and liver disease, etc. If the stem cells are genetically identical to the patient needing the cell transplant, then there is no rejection of the donated cells. This is the advantage of cell nuclear transfer or therapeutic cloning. The patient gives a cell of his or her own body, the nucleus of which replaces the nucleus in the egg, thereby creating an embryo which is a clone of the patient. Stem cells harvested from such an embryo will be genetically identical to the patient needing the transplant.
- 6. Cells have the capacity to divide and proliferate. This means that once stem cells have been harvested from embryos, they can continue growing on their own as stem cell lines. A bank for stem cell lines has been established by the Government, overseen by an ethics committee. This bank will provide a continuous source of stem cells for future research and treatment, avoiding the need to create 'factory lines' of

new embryos for stem cells each time they are needed. However, cell transplants from stem cells are not imminently available. Currently Parliament has passed laws that permit research only, not treatment. The potential good that such research might achieve is very great, but there is a long way still to go.

- 7. Alongside research on stem cells from embryos, research on the use of stem cells from other sources is proving fruitful. Umbilical cord blood and bone marrow are two sources of stem cells. Adult cells can be 'dedifferentiated' back into stem cells, and those stem cells 'redifferentiated' out again into the particular kinds of cells that are needed for treatment. Such sources of stem cells, which do not involve using embryos at all, are showing great therapeutic potential. The consensus amongst scientists, however, is that more understanding is needed of the development of stem cells in embryos before other sources of stem cells can be usefully and safely adopted.
- 8. It has been noted that the advantage of therapeutic cloning (ie cell nuclear transfer) is that it avoids the problem of cell transplant rejection. However, this could well be outweighed by the difficulties associated with cell nuclear transfer, and early indications are that it may never become the technique of choice to overcome cell transplant rejection. The medical techniques to deal with transplant rejection, which is well developed from years of experience in organ transplantation, may be preferable. Therefore, fears of cloning techniques being developed and perfected, and then abused to create human clones, may be unfounded.

How should Christians view these developments?

9. It is plain that for Christians the key question concerns the status of the embryo. Does it have the same right to deserve the protection that is accorded to early human life on the basis of the traditional respect for the sanctity of human life? The new developments promise benefits of various kinds in the advance of scientific understanding and medical knowledge, and in the eradication of serious disabilities. But in Christian thought, where the ends are not simply taken to justify the means, it must be a prior question whether what is done in pursuit of these goals is itself morally acceptable. To take a parallel case: medical research on adult subjects may be aimed at highly laudable ends, but must nonetheless respect the constraints on such research which are required by a respect for the dignity of human subjects.

The fetus in the Christian tradition

- 10. It should be noted that, historically, Christian writers refer to embryonic and fetal life only when they are dealing with punishments for killing life in the womb. Where distinctions are made between different stages of development of the embryo and fetus, this is in order to grade the seriousness of the crime. Even when distinctions are drawn, destruction of the embryo or fetus remains a serious crime at all stages of development. Because developments are so recent, the countervailing good of using embryos for medical treatment does not figure at all.
- 11. The **Septuagint translation of Exodus 21.22** was the version most commonly used by the early Christian Fathers as well as by the New Testament writers. It was followed in the old Latin version of the Bible which became the language of the moral tradition of the west. According to this text in its Septuagint version, if anyone strikes a pregnant woman and she

miscarries, then if the fetus is formed the penalty is death; if on the other hand the fetus is *me exeikonismenon*, not yet so formed as to be a copy or portrayal of the human form, then the penalty is a fine.

- 12. The **Epistle to Barnabas** (19,5 and 14,11) and the Didache (2,2) both condemn abortion without making any distinction between the formed and unformed fetus. It must be appreciated that they were criticising the sins of their society, including abortion in a list of wrongs. In this context they would not be expected to point out detailed distinctions such as is seen in Exodus 21,22.
- 13. **Gregory of Nyssa** has made two relevant statements but they are difficult to reconcile with each other. In his letter against Macedonius, who denied the full divinity of the Holy Spirit, Gregory argues that those who follow his teaching could not be called Christians. In this context he says an unformed embryo cannot be called a person, only a potential one (On the Holy Spirit against Macedonius). Here, Gregory seems to be assuming that everyone would agree that the unformed embryo is not a human being, only a potential one, for he uses it by analogy to make his point. In *The Making of Man* (28 and 29), however, he clearly rejects the idea of a delayed ensoulment. He argues against the notion of pre-existent souls and reincarnation, and also rejects the idea that the body comes first followed by the soul, and that the soul therefore exists to serve the body. He gives the examples of root, shoot, blossom and fruit, to be seen as a whole which gradually unfolds.

Augustine writes:

If what is brought forth is unformed (*informe*) but at this stage some sort of living, shapeless thing (*informiter*), then the law of homicide would not apply, for it could not be said that there was a living soul in that body, for it lacks all sense, if it be such as not yet formed (*nondum formata*) and therefore not yet endowed with its senses. (Quaestionum in Hept I II n 80).

Basil wrote to Amphilochus

A woman who deliberately destroys a fetus is answerable for murder. And any fine distinction as to its being completely formed or unformed (*ekmemorphomenou kai an exeikonistou*) is not admissible among us.

- 14. Basil's letter, which was a commentary on the canons of the Church, itself became included in the canons of the Church. Basil's ruling on the subject, which specifically mentions the distinction between the unformed and formed fetus, and condemns the abortion of both, was repeated at later councils and was finally incorporated into the legislation of the Trullo, which functioned as the disciplinary aspect of the fifth and sixth ecumenical councils at Constantinople.
- 15. The seventh century **Anglo-Saxon and Celtic Penitentials** and the **canon law of the Latin Church** from the 11th century made a distinction between the formed and the unformed fetus, with abortion of the former carrying more severe penalties than abortion of the latter. This was mirrored in the teaching of the Church, with the exception of Pope Sixtus V in 1588, and was reflected in English law. The teaching of St Thomas Aquinas favoured a later ensoulment.

He said that the soul did not enter the male fetus until it was 40 days old, and the female fetus until it was 90 days old. This philosophical view paralleled the dominant medical understanding of conception and quickening.

- 16. In 1869 **Pope Pius IX** abolished the distinction in legal penalties between early and late abortions. A greater understanding of embryo genesis linked to changes in philosophical understanding led to a focus on conception as the key point for body and soul, though it has been suggested that conception at that time meant not so much the moment of fertilisation as the implantation of the fertilised egg in the womb.
- 17. It could be argued, **in summary**, that from the seventh century until 1869 the western tradition drew a distinction in the seriousness of the wrong depending on whether the fetus was formed or unformed. Prior to that, views that are expressed are unclear or differ from each other.
- 18. In all cases, however, the abortion of an unformed foetus was never regarded as less than a very grave sin closely akin to homicide. This critical attitude to the practice of abortion and infanticide is predicated on a belief in the sanctity of human life, a belief which was in turn an expression of the Church's faith in the goodness of creation and of God's particular care for humankind.
- 19. In continuity with this tradition the Church of England has over the past thirty years repeatedly expressed concern at the increase in abortions, maintaining that 'All human life, including life developing in the womb, is created by God in his own image and is, therefore, to be nurtured, supported and protected'. In a series of resolutions the General Synod has

expressed a critical attitude towards current legal and social norms, taking the view that whilst abortion is in certain grave circumstances permissible (such as where the mother's life is threatened), its current widespread practice goes beyond such circumstances. At the same time the Church seeks to manifest the compassion which is properly extended to women who find themselves faced with difficult decisions.

The source and expression of new life in Scripture

- 20. In this section some passages from Scripture are cited for reference as representing the biblical witness upon which Christians have drawn.
- 21. Then the Lord God formed man from the dust of the ground, and breathed into his nostrils the breath of life; and the man became a living being. (**Genesis 2.7**)
- 22. When people who are fighting injure a pregnant woman so that there is a miscarriage, and yet no further harm follows, the one responsible shall be fined what the woman's husband demands, paying as much as the judges determine. (**Exodus 21.22**, see above)
- 23. Your hands fashioned and made me; and now you turn and destroy me. Remember that you fashioned me like clay; and will you turn me to dust again? Did you not pour me out like milk and curdle me like cheese? You clothed me with skin and flesh, and knit me together with bones and sinews. You have granted me life and steadfast love, and your care has preserved my spirit. (**Job 10.8-12**)
- 24. For it was you who formed my inward parts; you knit me together in my mother's womb. I praise you, for I am fearfully and wonderfully made. Wonderful are your works;

that I know very well. My frame was not hidden from you, when I was being made in secret, intricately woven in the depths of the earth. Your eyes beheld my unformed substance. In your book were written all the days that were formed for me, when none of them as yet existed. (Psalm 139.13-16)

- 25. Just as you do not know how the breath comes to the bones in the mother's womb, so you do not know the work of God, who makes everything. (Ecclesiastes 11.5)
- 26. The Lord called me before I was born, while I was in my mother's womb he named me. (**Isaiah 49.1b**)
- 27. Before I formed you in the womb I knew you, and before you were born I consecrated you. (**Jeremiah 1.5**)
- 28. These Old Testament passages clearly teach that human life is to be honoured within the womb and not simply after birth. This awareness of the sanctity of the fetus is striking from a time when there was little detailed scientific understanding of what was going on within a mother's body. The material conveys an overwhelming sense of mystery about the creation of life, and a reverence which is still observable in the way biological scientists and medical practitioners generally approach the matter.
- 29. From the New Testament it is worth noting the number of parables and analogies which feature the seed.

A theology of the embryo: simultaneous uniqueness and mutuality

30. Christian theology and scripture indicate that a person's life is both unique, known and loved by God from its

beginning, and also inseparable from its environment and context. We are made in the image of God: God is one and also three in one in the divine and loving mutuality of the Trinity. Mary is offered a chosen, named, unique person to be her son and the Son of God, but her child was to be born because of and for the sake of all creation. As the prophets tell us, in a place and at a time when we admit we do not know what happens, God knows us for who we are uniquely. Scripture also teaches that we are formed from the earth.

- 31. The characteristics of the early embryo that current scientific knowledge has demonstrated are i) that from fertilisation it has a unique genome; ii) that some of the cells of the early embryo will not form the fetus but the means by which the fetus will receive nourishment from its mother, that is, the umbilical cord and placenta; iii) the embryo may divide and become two or even three genetically identical siblings. The embryo may be seen as an exquisite expression of simultaneous uniqueness and being-in-relationship to people and environment.
- 32. We thus have a theological and scientific basis for affirming that from fertilisation, each and every embryo, no matter what its future, is a unique event which has never happened before and will never happen again. It is precious in creation (as affirmed in Jeremiah) and therefore instils in us a deep sense of sacredness and reverence for its existence. It should be noted that this spontaneous experience of reverence has been described by scientists who work with embryos. Our desire to love and nurture the beginnings of life is written into our sense of being human, along with the sense of outrage and disgust at atrocity. Our sense of the numinous, that is, both our wonder at the mystery of life and our sense of the presence of God in that new life, should never be lost or obscured by the

attraction or potential of using that life for other goals, however good they may seem.

- 33. Theologically and scientifically we cannot regard the early embryo, or indeed our adult selves, as hermetically sealed individuals. Thinking theologically about the embryo means thinking simultaneously about its uniqueness and about its relationship to its environment, its life, its vocation and its ultimate destiny. The life that we call sacred includes all of these inextricably, and it is not separable from its context. Even the shortest life is in relation to God and other human beings, whether it is the mother, the scientist or the recipient of therapy. We must look carefully at the web of relations into which any created embryos are placed. The principle of the sanctity of human life which we affirm must embrace the mutuality of all life, including the sick and the dying.
- 34. Scientific research and therapy are profoundly religious enterprises, ways in which we respond to God's promptings in us to bring healing and reconciliation to a fallen world. They depend on mutuality and inter-relationship. People give blood, donate organs and learn to treat and heal others. Anyone who is the recipient of a therapy comes into encounter with the healing presence of God revealed to us in Christ, whether it is recognised or not.

God's superabundant creativity and the meaning of 'waste'.

35. The superabundance of embryos, seventy per cent of which do not implant in the womb, is echoed throughout nature. Every living thing produces infinitely more seed than is ever used for reproduction. Only if the seed is implanted in soil in which it can flourish, as the parable teaches (Mark 4), can there be any fruit. If it is of God's being to give more than

enough, is it appropriate to regard that which is left over as waste, or is it meaningful in some other way? Biologically the generosity of nature is needed for the power of life and species development to overcome the force of entropy. Seed or eggs which do not reproduce are frequently sources of food for other creatures.

- 36. Nothing is truly wasted in the superabundance of God. Even rubbish tips are teeming with energy and life. Often they give off gases which if harnessed provide energy and power. In nature, as vegetation loses its leaves or dies off organic matters fall to the ground and decomposition begins. Nutrients are added to the soil and new life is made possible.
- 37. Significantly the place of the crucifixion outside the walls of Jerusalem was where the inhabitants of that city dumped their rubbish. So it was that the Son of man went to his place of execution among the waste and rubbish of the city. From the death, despair and discarded refuse in this extra mural wasteland was a flicker of hope that this was not an end but a beginning. Salvation and redemption were wrought not just on a cross but also in a wasteland. In nature, it is only if the seed 'dies' and is buried in the ground that new life can grow from it.

Consequentialist and deontological arguments

38. Both the scientific and the theological reflections have, it is hoped, illuminated what a human embryo is. They should have evoked an attitude of profound respect, love and wonder at the sheer mystery and intelligence of creation and life. Neither reflection, however, has told us what, in the end, we should do.

- 39. Morality is specifically concerned with right and wrong, good and bad action. It is concerned with what we ought to do, what we decide to do, implying volition, deliberate action, conscious thought and thoughtful action. Although morality might call upon nature and natural laws to help decide what is the right way to act, it does not work like nature in the ordinary sense. That is, when we are acting as morally sentient beings, we are precisely not acting from our natural inclinations
- 40 Because morality involves conscious thought, philosophers have found it to be a fertile ground for constructing methods for thinking about and then deciding what is the right or wrong action in any given case. When we are considering the merits of any proposed action, we are likely to be thinking in one of two ways or, ideally, in both. We will think about the *consequences* of the action in terms of whether it will leave the world a better place for ourselves and others (a consequentialist approach), or we will think about the merits of the action itself (a deontological approach). For example, we may find ourselves asked a question to which a truthful answer may cause harm to others. A consequentialist will think, "If I tell the truth the outcome will harm others, so I will lie." A deontological thinker will conclude, "It is wrong to lie, therefore I will tell the truth and risk the consequences."
- 41. A more integrated response from one who is slower to act, thoughtful of others, concerned with truth and reality, and who therefore seeks a more integrated response, will face a dilemma. This is important to acknowledge; wisdom does not necessarily mean knowing the right way to respond on the instant. Those who choose an exclusively consequentialist route, or an exclusively deontological route, have ignored part

of what is good or morally right, and that should give us pause for thought.

- 42. Most moral dilemmas, as the word implies, present this characteristic duality. That is, there are two perceptions of moral rightness that fit the situation, but they are incompatible with one another: if one is followed, the other is violated. Either you lie, or you hurt others. This is the dilemma, the radical duality. Both sides have merit, each would violate the other if followed. Those who would discern the truth cannot afford to ignore the other side of the argument, because that would be to deny some aspect of what matters. It would be to say, "In order to make a decision, I must simply cut out of the picture something that is really there. I cannot afford to give it any regard, because that would make a decision impossible." But to accept the validity of both arguments means that our minds have to encompass a polarity, holding simultaneously to two fixed points that can seemingly never join.
- 43. We can be encouraged to attempt such apparently impossible thinking by remembering the already impossible concepts considered in the theological section of this paper. God is both one and three; human life is unique and utterly mutual with its surroundings and with God; every last thing in creation is precious and yet nature seems magnificently wasteful. The unity we should be determined to discover in the face of apparently radical duality is not the narrow singularity of dropping one of the two sides of the argument. Rather it involves seeking out that which is good and true in each of the arguments, and stubbornly supporting that goodness and truthfulness and then seeing what happens.
- 44. Answers that come from such daring open mindedness have some characteristics. They are specific to the question

being posed, not a general response to a general dilemma. They are unexpected, somehow new, probably very simple. No one is criticised or demonised or put in the wrong. The answer does not need defending; you do not mind if others disagree, nor do you feel very attached to your solution. It is just there, on the table, an offering for the use of all.

- 45. In the debate in the House of Lords on the Regulations of 2001, the Bishop of St. Albans said: "There is a world of difference between understanding that discrete package of information [about embryo research] and knowing, imaginatively, what its implications might be. I do not necessarily need more information; what I need, and what I believe the public needs, is more wisdom.
- 46. "The problem is that wisdom is not a commodity nor is it easily or rapidly achieved. If I look at people I believe to be wise I think that they share certain salient characteristics; they seem to be able to integrate, at a deep level, experience, learning and reason; they are open-minded but bring to that open-mindedness a shrewd wit; their thinking is marked by an inherent and self-authenticated elegance; they are forgetful of self; they are measured... [Similarly] an appreciation of beauty cannot be hurried; it requires humility, eyes cleansed by love and a willingness to be seriously patient. Therefore I am making a plea for wisdom to be given as much room as the excitement, verve and pace of scientific discovery."

The rights and wrongs of embryo research

47. The principle that the ends do not justify the means underlies the current British legislation regulating the use of embryos (the Human Fertilisation and Embryology Act 1990 and the 2001 Regulations), since they permit research on embryos of up to fourteen days old but no more. If this

principle had not underlain the framing of the legislation, the Act might have countenanced experimentation on embryos at whatever stage, providing the good outweighed the harm. Since it does not take this view, it holds in effect that embryos prior to 14 days old are not to be accorded the same moral status as embryos at subsequent points in their development.

- 48. Christians who hold that the legislation is largely correct will regard the early embryo as having developmental status. This stance accords the embryo a profound moral respect on the basis of its potential to develop into a human being, but it sees that ethical status of human personhood as being something that develops with increasing complexity of being. The stance is based on the fact that there is no clear continuity of individual identity from fertilisation to the fetus in the womb. The undifferentiated cells of the fertilised egg in its first few days form not only the fetus but also the placenta and umbilical cord. Furthermore embryos can divide to form identical twins. Seventy percent of them will be washed away.
- 49. The developmental view of the embryo acknowledges that, from a scientific point of view, the genetic make up of the fertilised egg is exactly the same as the genetic make up of the adult it will become. However, from the standpoint of ontology rather than science those early, dividing cells have the potential to become an individual but they are not, at that stage, an actual individual. The actual individual emerges with the primitive streak at about 14 days. After that twinning is no longer possible and the outer cells of the early embryo have established themselves as umbilical cord and placenta. With the formation of the primitive streak there is the basis of the nervous system and all that makes for a particular individual. From that point it is possible to say that there is a continuity of identity with the later child and adult and therefore it is right to

talk about an individual human being. Before that there is only the potential for an individual human life.

- 50. As we saw in the section on the Christian tradition, a developmental view of human personhood has not historically been absent from Christian thinking. The developmental view underlay the majority opinion in the Warnock Report and it is the basis for the of the HFE Act of 1990, with its restriction of embryo growth *in vitro* to 14 days and its permission to use embryos within that limit for tightly defined and specifically licensed research purposes. The embryo is being regarded as very much more than a 'speck of protoplasm', for it may only be manipulated for serious purposes that otherwise would be unattainable.
- 51. Those who take a developmental point of view may incline to take a less cautious stance in relation to practices which might yield obvious benefits to the infertile, those suffering from debilitating illnesses and to scientific research generally. In contrast to earlier Christian views concerned mainly with gradations of wrong on procuring or performing abortions, modern debate about the morality of embryo research has to take into consideration the enormous potential good to which this research could lead.
- 52. It should be noted that an absolutist view of the embryo does not accord with actual practice. Funeral services are not held for embryos that fail to implant and are lost. Few would suggest that heaven is peopled by a large majority by embryos of fewer than 14 days' gestation.
- 53. The arguments in favour of a developmental view of the embryo are not, however, uncontroversial.

- 54. First, the uncertainty about whether an early embryo will go on to become an individual human being or will become two or none, is just that: an uncertainty. Ought we to argue from our uncertainty about whether something is true (ie whether the early embryo will finally become an individual human being) to its being false (ie that the early embryo is not an individual human being) or to its being permissible for us to act as if it were false?
- 55. Second, the fact that the early embryo is relatively undifferentiated is not necessarily significant. It might be argued that the duty to respect the sanctity of life is owed only to fully developed human beings, or only to persons, and 'person' could be defined in such a way as to exclude early embryos from the category. But this does not constitute an argument, only an attempt to win the argument by stipulative definition. Viable embryos, if allowed to go to term, will in due course possess those capacities we associate with fully developed human beings that is to say, they possess the potential to be such people, and we usually uphold that it is wrong to deprive people of capacities they will possess in the future, even if they do not possess them now.
- 56. Third, it is difficult to see what significance should be attached to the natural wastage of early embryos or to the fact that many so lost are genetically impaired. The fact that infant mortality has often stood at very high levels, especially so in the case of the handicapped, does not cause us to doubt our duty to respect the sanctity of infant life in general, nor the sanctity of the life of the handicapped in particular.
- 57. Those who make these rejoinders may agree with the claim made by John Paul II in his Encyclical, *Evangelium Vitae*, 'from the time that the ovum is fertilized, a human life is

19

begun'. In any case they are likely to think that uncertainties in this area favour a morally cautious policy of respecting even early embryos. Our earlier discussion of the uniqueness and mutuality of the embryo together with an understanding of the creativity of waste may, however, incline us to express our respect for the embryo by using it for the good of all in morally serious ways.

Conclusion

58. In reflecting on these issues all Christians will seek to frame their views in the light of the fundamental convictions about God and humankind which shaped the teaching of the early Church. Whatever particular policy conclusions Christians may come to, they will agree that it is vital that scientific and medical developments be celebrated and encouraged, but they must also be carefully and critically assessed to ensure that such developments are compatible with the dignity and vocation of human kind as created by God to which the Christian faith witnesses.

APPENDIX ONE: SYNOD'S PREVIOUS DEBATES ON HUMAN FERTILISATION AND EMBRYOLOGY

In 1983 the Board for Social Responsibility made a short and preliminary submission to the DHSS Inquiry into Human Fertilisation and Embryology set up by the Government under the Chairmanship of Baroness Warnock. In 1984 the Board made a detailed response to the Report of that Committee. The following year the report, *Personal Origins* (CIO, 1985) was published on the theological and ethical issues in this area. This report, now in its second edition, is the most comprehensive attempt to tackle these issues by the Church of England.

The first debate in the General Synod on this subject was held before the publication of *Personal Origins* in February 1985. The Synod, by a narrow margin, rejected the position set out by the Board in its response to the Warnock Committee on the subject of research using human embryos up to 14 days old. In July 1985 when speakers were able to draw on the recently published *Personal Origins* and look at a wider range of relevant issues the following motion was carried:

'That this Synod

i. commends the report *Personal Origins* to the dioceses and to the wider Church for study, debate and response on the questions raised in the area of human fertilisation and embryology for Christian attitudes and practice,

ii. regards as essential the suggestion in the Warnock Report for a national licensing authority (already welcomed by the Board for Social Responsibility) to regulate research and to control infertility services, and welcomes the suggestions made by the Board that such an authority should continue the debate on the moral aspects of technologies concerned with human embryology and fertilisation and to this end membership of the authority should include representatives from the social work and legal professions and from members of the Churches skilled in moral theology.'

In February 1988, the General Synod debated a Private Member's Motion (Dss Una Kroll) on the Warnock Report and carried the following motion:

'This Synod in the light of the commitment of HM Government to proceed to legislation on Human Infertility Services and Embryo Research:

- reaffirms the General Synod Resolution of July 1983, "that all human life, including life developing in the womb, is created by God in his own image and is therefore to be nurtured, supported and protected";
- welcomes the commitment of HM Government to establish an Independent Statutory Licensing Authority to regulate research and infertility services;

- iii. supports the proposal to leave all surrogacy arrangements outside the protection of the law;
- iv. requests the Board for Social Responsibility to review and report on the acceptability of AID as a solution to the problem of infertility, having regard in particular to the psychological risks to the children so conceived and their families, as the children grow in awareness of their origins.'

The establishment of the Human Fertilisation and Embryology Authority (HFEA) in 1991 was widely welcomed, building as it did on the six years of work of the Interim Licensing Authority. The Authority issued a draft Code of practice and an ecumenical response to this was prepared by representatives of several Churches including the Church of England. In 1993 the Authority issued a consultation paper on Sex Selection to which the Board responded. In 1994 the Board responded to the Authority's Public Consultation Document on *Donated Ovarian Tissue in Embryo Research and Assisted Conception*.

The Board issued a second edition of *Personal Origins* in 1996 to take account of developments in assisted conception techniques. This included the new legislation of the Human Fertilisation and Embryology Act 1990 and the creation of the regulatory body, the Human Fertilisation and Embryology Authority. [Please note: there remain available a considerable number of copies of this report, though not enough for all Synod members, who presumably were issued with copies in 1996.]

In November 1997 the General Synod carried the following Motion:

'That this Synod, believing that children are a gift from God in creation and that the welfare of any child created by third party donation of eggs or sperm is of overriding importance, including the need of the child for a father:

- a. affirm marriage as the ideal context for the procreation and rearing of children;
- b. note the ethical considerations of gamete donation contained in *Personal Origins*;
- c. believe that treatment should normally be given to women only during years when, under normal circumstances, they might conceive; and,
- d. welcome the decision of the Human Fertilisation and Embryology Authority to phase out payments for donors.

APPENDIX TWO: BSR RESPONSES TO RELATED CONSULTATIONS

Since 1997 the Board for Social Responsibility has responded to the following related consultations:

- Response to the Human Genetics Advisory
 Commission and the Human Fertilisation and
 Embryology Authority's consultation document on
 cloning issues in reproduction, science and medicine,
 April 1998.
- ◆ Response to the House of Lords Select Committee on Stem Cell Research, June, 2001.
- ♦ Response to the Department of Health Donor Information Consultation: providing information about gamete or embryo donors, June 2002.
- Response to the Human Fertilisation and Embryology Authority on Sex selection: choice and responsibility in human reproduction, January, 2003.

The House of Bishops has also been briefed in preparation for debates on stem cell research in 2000 and 2001.