NEW REPRODUCTIVE TECHNOLOGIES such as in vitro fertilisation, donor insemination, surrogacy, cloning, etc. form an excellent example of an area in which moral and theological reflection struggle to keep up with developments in technology. In this article we will examine the range of new technologies and novel developments together with the recent background, and then look at three overlapping questions that recur in debates in this area: first, the commodification of the means and products of reproduction, secondly, the role and status of the family, and thirdly, the moral status of the embryo.

The terms and scope of debate in the UK have been determined first by the Warnock Report, and then by the Human Fertilisation and Embryology Act 1990 which followed from it. Much of the material produced in response to the Warnock Report is still of relevance, though the report itself was criticised at the time on a number of fronts, notably for its refusal to commit itself in detail on the question of the moral status of the embryo.

The 1990 Act regulates treatment for infertility and research that involves the creation of embryos outside the body. It covers artificial insemination, either by the husband or a donor, donation and storage of sperm or eggs, in vitro fertilisation and surrogacy. It does this by creating a system of licences administered by the Human Fertilisation and Embryology Authority (the HFEA), that are required for the storage of gametes, for treatment and for research. In the case of this latter it allows licences to be issued for research up to the fourteenth day of embryonic development, that is until the appearance of the primitive streak, the first stages of nerve development.

Like the Warnock report before it, the Act does not specify what sort of an entity an embryo is, but rather seeks to create a framework of regulation that is
sufficiently comprehensive for the HFEA to exercise effective control over all aspects of treatment and research. This means that regulation can be said to come before understanding. Pragmatically speaking this may be seen as a wise position to adopt in the face of moral uncertainty and a lack of consensus on so many issues. Two recent cases of controversy provide good examples of this in practice. First, Mrs Diane Blood raised the question of posthumous fatherhood by requesting to be allowed to be inseminated using the sperm of her dead husband without his written consent. Secondly, and more recently, there has been much speculation following the announcement of the successful cloning of an adult sheep. In each case the framework of the 1990 Act can be said to have worked successfully, in that its provisions sufficiently covered the novel situations, and in each case the proposed procedure was indeed subject to regulation by the HFEA. In the Diane Blood controversy, the legislation specifies that comprehensive directions should be obtained from the gamete donors covering the uses to which their sperm or eggs are to be put and, crucially for Mrs Blood, what should happen in the event of their death. Without the relevant consent nothing may be done with the gametes concerned, not even storing them, so that they must, in the ambiguous phraseology employed in the Act, be 'allowed to perish'. Mr Blood's sperm had been obtained under legally questionable and extreme circumstances (he was close to death), and so the required direction had not been obtained.

As to cloning, it is forbidden. The Act specifically excludes the cloning of humans from those things that the Authority has discretion to license. 1

The effect of this state of affairs is that the debate on the substantive underlying moral issues is still energetic, even if attitudes are increasingly formed by the practice that is imposed by the framework of the 1990 Act and the HFEA's current code. Needless to say this provides a theological challenge, and one to which different parts of the church have risen in different ways. 2

People as commodities

People are fundamentally different from cars or washing machines or houses. They are valuable because they are created by God, and are bearers of his image. This is particularly apparent in the having and bringing up of children. The manipulation of reproductive processes in general, and some specific techniques in particular, such as sex selection or cloning, appear to threaten or to deny this reality. Surrogacy, in those parts of the world where payment is permitted, looks suspiciously like the selling of babies.

This fear is often articulated, and is readily understood, both from a theological and a secular point of view, but is often vague in its application. The Kantian principle that one should always treat humanity as an end in itself, and never solely as a means to an end, is of some help in putting one's finger on those uses which

1 Human Fertilisation and Embryology Act 1990 s. 3(9)(d).
thwart to treat people as commodities. The word 'solely' is significant. All parents will be aware of what they gain from their children, and of times when they 'use' them for their own social or emotional ends.

Manipulations that are performed for the sake of the child to be born will thus be more acceptable than those done for social convention or personal preference. Sex selection for the avoidance of an hereditary and gender linked condition will fall in the first category, whilst that done because a couple 'like girls more than boys' will fall into the second.

Cloning of humans is not yet a reality, but its possibility has attracted much attention. It is perhaps an interesting comment on society's shift of the locus of personal identity from ideas of the soul to one's genetic makeup that much of this debate seems to proceed on the mistaken basis that cloning would allow the duplication of individuals. Identical twins share a set of genes, but they are not the same individual. A person born after my death with the same genes as me would not be me, and would certainly not share my memories or consciousness.

However, it is not difficult to imagine situations in which requests for human clones could be made. What if the parents of a child killed in Dunblane could later arrange to have a child with the same genes? Sympathy might permit such a course of identical reproduction, but would such a child have been born for its own sake or for the sake of its grieving parents and their memories of its dead twin? Alternatively, a child conceived under normal circumstances by such bereaved parents, a child with a naturally different genetic structure and a visibly different identity would be a clearly different and new 'end in itself'. Such a child could still assist the parents in overcoming their earlier loss, but would not thereby be robbed of its own unique significance.

The role of the family

Many of the fears or reservations surrounding new reproductive technologies focus upon the actual or possible effect on the status and shape of family life. Our relationships have a theological significance, and our family relationships perhaps particularly so. Is the picture of the marriage relationship as mirroring that between Christ and his people altered or threatened, for example, when the children of that marriage are the product of gametes from donors outside the marriage? There exists a variety of opinion over whether or not gamete donation approximates to adultery in breaking the bounds of the marriage relationship. Christian hostility has however been much more uniform with regard to surrogacy. In the UK surrogacy arrangements are legally unenforceable and payment, other than for expenses, is forbidden. However, the Human Fertilisation and Embryology Act 1990 made it easier for the commissioning couple to adopt children born as a result of a surrogacy arrangement, without going through a full scale adoption procedure. Surrogacy has become a routine, if still rather uncommon, procedure for infertility clinics.

The 1990 Act also seeks to regularise the legal status of children born as a result of infertility treatment, making it clear that they are legally held to be the children of the couple receiving treatment and not of any gamete donors. Their position is
thereby made to approximate as closely as possible to that of children born 'naturally' i.e. without the aid of infertility treatment. The Act also requires clinics offering treatment to take account of the welfare of the child who will be born, 'including the need of that child for a father.' This does not completely rule out the treatment of women without a partner, though it does tilt the ground against it to some extent.

Ironically in the light of this provision, the Act also creates a category of children who are legally fatherless. It provides that gamete donors are not to be taken as the legal parents, and so when a single woman is treated alone, or sperm or eggs are used posthumously, then the child that is born has no legal father. It remains to be seen what, if any, discernible practical effect this has.

The status of the embryo

The status of the embryo is often identified as the central question in both the debate over abortion and over IVF and other fertility treatment. This may seem to be self evident, even to those who may disagree as to what the embryo's status is. But as we shall see, even this consensus regarding the problem of the embryo is itself open to dispute.

The question inevitably raises its head in connection with research on embryos, and with in vitro fertilisation techniques in which eggs are fertilised outside the body and then implanted in the womb of the woman being treated. In both these cases the destruction of embryos is required. In the case of research this may occur as part of the experiments in question, but in order to remove any doubt, the 1990 Act specifies that embryos which have been used for research may not be used for any other purpose, i.e. in treatment, and must therefore be 'allowed to perish'.

In the case of IVF treatment the creation of 'spare' embryos is usual, and moreover, in order to maximise the chances of a successful pregnancy, more than one embryo is implanted. If more than a safe number begins to grow it becomes necessary selectively to abort one or more later in the pregnancy.

Often the question is asked in terms of when, in its development from conception to birth, the embryo/foetus either achieves personhood or becomes capable of having either rights or interests. We will briefly examine various alternatives for such a significant point.

Much theologically inspired opposition to abortion identifies conception as the morally significant moment. This is the view consistently advanced in recent official pronouncements of the Roman Catholic Church, including the 1994 Catechism:

Human life must be respected and protected absolutely from the moment of conception. From the first moment of his existence, a human being must be recognised as having the rights of a person – among which is the inviolable right of every innocent being to life.5

Viability, the moment at which the foetus is capable of surviving outside the womb, was the point identified in the 1967 Abortion Act after which abortion was not

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3 s. 13(5)
4 s. 15(4)
5 Catechism of the Catholic Church, Chapman, London 1994, no. 2270, at p 469, quoted in Smith Life and Morality p 23, which should be seen for a fuller account.
permitted, with the *prima facie* assumption that viability had been reached by the 28th week of gestation. Viability is in any case not an absolutely precise term, and by the time the Act came to be amended as part of the Human Fertilisation and Embryology Act, advances in medical technology meant that foetuses born a good deal earlier than 28 weeks, at 24 weeks or in some cases earlier, were routinely surviving. To remove ambiguity as to whether the limit was viability or 28 weeks, the 1990 amendments specified 24 weeks as the limit in normal cases. Thus although the law no longer specifies viability as the principle upon which its provisions are based, the logic of viability still stands behind the current legislation.\(^6\)

The emergence of sentience is also a point that can be argued to have moral significance, though it is even more difficult to pin down than the moment of viability. Whereas anti-abortion campaigners emphasise discoveries that suggest that the foetus begins to feel pain at an early stage in pregnancy, pro-abortion campaigners do the opposite. Utilitarians hold that the basis of morality lies in the maximising of good consequences, and in particular the maximising of either feelings of pleasure or the satisfaction of preferences. Sentience is potentially significant here because it is a necessary condition for the experience of either pleasure or pain, and thus for inclusion in the utilitarian calculation.

Historically other points in foetal development have been taken as significant.\(^7\) There has, at various times, been lively debate over when the soul may be said to be first present. Before the nineteenth century the point of quickening, when the foetus begins to stir in the womb, was a moment of legal significance; and thus gave rise to different penalties for abortion carried out before and after quickening.

As with abortion, it is often assumed that the acceptability, or otherwise, of the various new reproductive technologies is determined by the status of the embryo. If an embryo does indeed have the rights of a person from the moment of conception then any technique that necessarily involves the destruction of fertilised eggs will be unacceptable, as will research on them that is not done for their benefit.

The debate over what the status of the embryo is and over what are the morally significant points in embryonic development has been fierce, and continues without resolution.\(^8\) However alternative strategies are also discernible. There are writers from widely differing backgrounds who approach the question from different directions, either as an effort to break the log jam, or because they wish to

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\(^{6}\) There is a significant exception to this in the cases where there is 'substantial risk that if the child were born it would suffer from such physical or mental abnormalities as to be seriously handicapped'. (The Human Fertilisation and Embryology Act 1990 s. 37(1)(d)). This has been the target of much criticism by churches and others arguing that in making a distinction between handicapped and 'normal' foetuses the law is beginning to suggest that handicapped lives are of less worth than others.


demonstrate that the truly significant issues lie elsewhere. We will examine three such, respectively arguing from a feminist, a liberal and a Christian point of view.

Judith Jarvis Thomson, in a much reprinted article, argues forcefully for a woman's right to choose, by asking us to consider an analogy that concedes the whole of the point about whether a foetus should be treated as a person or not. Imagine that you wake up one morning in hospital and discover that, without your knowledge, you have been connected by a tube to a famous violinist, who needs the use of your kidneys for a period to recover from an otherwise fatal condition. The doctors explain that this was done by the Society of Music Lovers, who admire the violinist concerned, without the consent of the hospital authorities either. Had they known they would have forbidden it. However, now that it has happened you should allow the violinist the use of your body for the nine months that it will take him to recover, since violinists are persons and therefore have a right to life. If the contention that the foetus is a person is to form an adequate basis for an argument against abortion, Thomson argues, it will be necessary to believe that there is now an obligation on you to spend nine months in bed with the violinist. It would not be enough to assert that it would be an admirable or a charitable thing to do, but that it would be actively wrong for you to disconnect the tubes and walk away. 10

The influential legal philosopher Ronald Dworkin also seeks to shift the debate away from arguments over the point at which the foetus should be treated as a person. He contends that the two sides of the seemingly polarised debate between 'a woman's right to choose' on one hand and 'life begins at conception' on the other, in fact have more in common than their rhetoric would suggest. 11 He detects a broader spread of views in both camps than is usually admitted, and, intriguingly, identifies a shared commitment to the 'sacredness of life'. The two sides differ in the relative weight they give to the natural, biological element of life and to the human element. Those who oppose abortion give more weight to the former and those who prize the right to choose to the latter. Dworkin admits that the notion of the sanctity of life is a religious one in the very broadest sense, but claims that it does not necessarily require belief in God.

Stanley Hauerwas thinks that the theological interest in both the debate over abortion and in vitro fertilisation does not lie in arguments over the status of the conceptus, but in the question of society's willingness to reproduce, and attitudes

11 Life's Dominion, chapters 1-3.
to its children. The fact that the Christian community as a whole values the having and bringing up of children is a sign of our trust in God and a product of our hope for the future. Abortion is thus a denial of trust and hope, and in vitro fertilisation a questionable use of resources to allow a relatively small number of women to experience pregnancy and a similar number of couples the satisfaction of having their children.

The Revd. Jeremy Caddick is Dean of Emmanuel College Cambridge.

Further Reading

In addition to the works referred to in the text the following are useful.

Pre-Conceived Ideas. A Christian Perspective of IVF and Embryology, a report produced in 1996 by the Church of Scotland Board of Social Responsibility provides an excellent brief overview of the issues involved. It is available by post from The Public Relations Office, The Church of Scotland Board of Social Responsibility, Charis House, 47 Milton Road East, Edinburgh EH15 2SR, price £6.50, as well as from some bookshops.


Margaret Brazier Medicine, Patients and the Law, Penguin, Harmondsworth, 2nd edn 1992, chapters 12 and 13, is an clear and concise outline of the law relation to both abortion and new reproductive technologies.


Ronald Dworkin, Life's Dominion: An Argument about Abortion and Euthanasia, Harper Collins, London 1993, especially chapters 1-3, provides a new way of looking at the debate over abortion and the status of the embryo, as well as an intriguing use of religious ideas in an otherwise secular context.