6

The ethics of cloning for reproductive purposes

INTRODUCTION

- 6.1 This chapter discusses the issue of cloning for reproductive purposes. The process of cloning for reproductive purposes as it is currently envisaged was outlined in Chapter 2, (paragraph 2.40). However, in the future, the artificial reproduction of a human embryo for implantation, gestation and the birth of a human being may take place using a range of techniques deriving from existing cloning technologies.¹ The current focus of attention (and the discussion in this chapter) is on the use of the somatic cell nuclear transfer technique to achieve this result. The Committee's rejection of the use of cloning techniques for reproductive purposes extends to future developments of such technologies that also aim to reproduce a whole human being unless other social and ethical issues are resolved, and this seems most unlikely for the foreseeable future. The following discussion outlines the evidence the Committee received on cloning for reproductive purposes and sets out its reasons for rejecting the use of cloning technologies for such purposes.
- 6.2 AHEC's first recommendation to the Commonwealth Minister for Health and Aged Care was that the Commonwealth Government should

¹ Some may argue that this description could apply equally to existing assisted reproductive technologies by means of, for example, *in vitro* fertilisation. The Committee emphasises that its rejection of cloning for reproductive purposes involves the use of somatic cell nuclear transfer techniques or further developments of it

...reaffirm its support for the UNESCO Declaration on the Human Genome and Human Rights, in particular Article 11 ...²

6.3 Article 11 states, in part, that

Practices which are contrary to human dignity, such as reproductive cloning of human beings, shall not be permitted.³

- 6.4 The Attorney-General's Department submitted that Article 11 refers to 'the replication of a whole human being with an identical gene set with a viable post-natal existence'.⁴ This interpretation was strongly disputed by Dr Nicholas Tonti-Filippini who submitted that the term 'reproductive cloning' in Article 11 also includes cloning human embryos for research purposes.⁵ The interpretation of Article 11 is discussed in detail in Chapter 10. The use of embryos in other cloning research is also a crucial issue and it forms the focus of Chapter 7.
- 6.5 In its Glossary of Terms at Appendix 3 to the AHEC report, AHEC defines 'cloning' as 'asexual propagation without altering the nuclear genome'.⁶ The same Glossary contains the following definition of 'human reproductive cloning'—the 'creation of human beings genetically identical to one another or to any other human being'.⁷
- 6.6 Except in relation to recommendation 1 and the UNESCO Declaration upon which it is based, or when quoting the views or findings of others, the body of the AHEC report does not use the term 'reproductive cloning'.⁸ Nor does the report discuss its meaning.
- 6.7 Given the discussion in Chapter 5 of this report of the ambiguity inherent in some of the terminology in the AHEC report, it is unclear what precisely, AHEC means by the term 'reproductive cloning' in the context of its discussion of the ethical issues. It could refer to:
 - the use of somatic cell nuclear transfer with the intent of producing a whole human being; or

- 6 AHEC report, Appendix 3, p.50. The Glossary is reproduced at Appendix E of this report. See also Chapter 2 of this report at paragraphs 2.30-2.36 for a discussion of the definition of 'cloning'
- 7 AHEC report, Appendix 3, p.52. See Appendix E of this report
- 8 See for example AHEC report at paragraphs 2.29, 5.11 and 5.12

² AHEC report, Executive Summary, p.v and Recommendations and Resolutions, p.43. The AHEC recommendations are reproduced at Appendix D of this report

³ AHEC report, Recommendations and Resolutions, p.43. Article 11 is set out in full on p.43 of the AHEC report. See also Chapter 10, paragraph 10.12

⁴ Attorney-General's Department, *Transcript*, p.136. Professor Chalmers also stated that that was his understanding of Article 11, *Transcript*, p.2. The interpretation of Article 11 of the UNESCO Declaration is discussed at paragraphs 10.14–10.26 of Chapter 10

⁵ Dr Nicholas Tonti-Filippini, Submissions, p.S591

- the use of somatic cell nuclear transfer with the intent of producing an embryo with no intention of implanting that embryo into a woman's uterus or seeking the production of a whole human being; or
- both of the above.
- 6.8 The Committee received much evidence that suggested many people had varying ideas about what conduct the term 'reproductive cloning' described and all three of the above possibilities were present in the evidence.
- 6.9 It was clear that many submissions expressed views based on an understanding that 'reproductive cloning' means the use of cloning techniques with the intent of producing a whole human being—or as more commonly understood—the copying of human beings. Both the AMA and the Coalition for the Defence of Human Life, for example, understood this to be the meaning AHEC intended.⁹
- 6.10 The scientists who gave evidence expressed a similar understanding of the term 'reproductive cloning' although the way in which this was expressed varied. Professor Short stated that it meant 'reproducing another adult individual'.¹⁰ Professor Williamson said that by reproductive cloning he meant 'the creation of a living foetus or individual'.¹¹ Professor Serjeantson of the Australian Academy of Science stated that reproductive cloning 'represents the manipulation of the embryo or germ line tissues in order to produce a new individual'.¹² The Human Genetics Society of Australasia defined 'cloning' as:

to produce a liveborn individual who shares a full genetic complement with a pre-existing child or adult donor of a somatic cell nuclear genome.¹³

6.11 Professor Trounson said:

You can clone a gene and that is gene cloning; you can clone a cell and that is cell cloning or you can clone an embryo and that is

- 10 Professor Roger Short, Transcript, p.7
- 11 Professor Robert Williamson, *Transcript*, p.15
- 12 Professor Sue Serjeantson, Transcript, p.64
- 13 Human Genetics Society of Australasia, *Submissions*, p.S508. The Australian Research Council also agreed with this definition, *Submissions*, p.S225

⁹ AMA, Submissions, pp.S25, 26 and Coalition for the Defence of Human Life, Submissions, p.S268. Dr John Palmer of the Royal College of Obstetricians and Gynaecologists indicated that the College supported the statement of the Federation of International Gynaecologists and Obstetricians (FIGO) that 'cloning for the purpose of implantation into the human uterus for the development of a pregnancy' should be prohibited, *Transcript*, p.33

embryo cloning. Possibly you could clone a person and that would be reproductive cloning or cloning of people.¹⁴

- 6.12 However, it was also clear that many submissions expressing opposition to 'reproductive cloning' also included, within their understanding of that term, the use of cloning techniques to produce an embryo but with no intention of seeking the production of a whole human being. Such an embryo might be produced for research purposes or as part of medical treatment. Most organisations expressing this view were of a religious nature and their views were supported by many members of the public.
- 6.13 The Catholic Archdiocese of Melbourne, for example, argued that no matter what the research is called:

... what occurs is the generation of a human embryo by cloning; the only difference is in how long that embryo is allowed to develop. In the former case [so-called therapeutic cloning] it is for hours, days or weeks until it is used for deriving cells or other materials and destroyed; in the latter [cloning for reproductive purposes] it is allowed to develop to term. There is no difference in the kind of cloning, only in what the scientist later does to the cloned human being.¹⁵

6.14 Ridley College also submitted:

The cloning of human embryos or foetuses for the purpose of the production of tissues or organs for transplantation ... is really reproductive cloning (which has the aim of producing a human foetus which is genetically identical to another human being), because it does involve the production of such a foetus (or embryo) but not with the aim of allowing this foetus to come to term and be born, but with the aim of using it for "spare parts".¹⁶

6.15 As noted in Chapter 2, the Committee recognises that much of the terminology used in describing research involving cloning technologies is ambiguous and unhelpful. The following discussion of cloning for reproductive purposes centres on the use of the somatic cell nuclear transfer technique for reproductive purposes because that is the focus of current attention. The arguments presented would apply equally to any further developments in the technology that aim to achieve the same end.

¹⁴ Professor Alan Trounson, *Transcript*, p.4

¹⁵ Catholic Archdiocese of Melbourne, *Submissions*, p.S512. The Coalition for the Defence of Human Life submitted that '...*any* cloning procedure which is successful in producing a human embryo is reproductive', *Submissions*, p.S268

¹⁶ Ridley College, *Submissions*, pp.S29 and S30

WHAT COULD REPRODUCTIVE CLONING BE USED FOR?

6.16 It may well be asked what use could be made of reproductive cloning technology. Several suggestions have been made. The most commonly suggested reason would be to assist people who cannot have children by means of existing assisted reproductive technologies to reproduce. It may also enable people to avoid passing on genetic diseases such as mitochondrial diseases. Other suggestions have included enabling people to clone a dying or deceased child or relative, enabling homosexual couples or single women to have children and enabling parents to choose the characteristics of their offspring.

OVERWHELMING OPPOSITION TO CLONING FOR REPRODUCTIVE PURPOSES

6.17 The Committee strongly opposes cloning for reproductive purposes, that is, the use of somatic cell nuclear transfer techniques or the use of any future technology for the production of a whole human being.¹⁷ This is consistent with the overwhelmingly strong opposition to cloning for reproductive purposes that was expressed by nearly all who provided submissions or gave evidence to the inquiry. This evidence is outlined in the following paragraphs.

WHY DO PEOPLE OPPOSE CLONING FOR REPRODUCTIVE PURPOSES?

- 6.18 A variety of reasons was expressed for this strong view that cloning for reproductive purposes would be unethical. Most people relied on more than one reason for their opposition. The most common arguments cited in favour of the view that cloning for reproductive purposes should be prohibited are outlined below. These include:
 - the lack of any medical need for cloning for reproductive purposes;
 - cloning for reproductive purposes would constitute an infringement of human dignity;

¹⁷ The Committee reiterates that these comments do not extend to existing techniques of assisted reproduction, namely IVF and GIFT

- cloning for reproductive purposes would have a negative effect on the family and personal relationships;
- cloning for reproductive purposes would undermine individuality and identity;
- it would be unsafe;
- cloning for reproductive purposes would potentially pose a threat to human diversity and run the risk of reintroducing notions of eugenics; and
- it would raise the potential for coercion of women.

Each of these arguments will be addressed in turn.

- 6.19 The previous chapter outlined the four factors AHEC considered should be taken into account when pondering the ethical issues raised by proposals to engage in human cloning. These were the ethical significance of:
 - the objectives or goals for which cloning might be pursued as a means;
 - the circumstances in which cloning might take place;
 - cloning in itself; and
 - a social policy which permits cloning in some circumstances but not in others or of a policy which prohibits it altogether.
- 6.20 These factors were reflected in the reasons people gave for opposing cloning for reproductive purposes. In many cases these reasons were not articulated in the same form as in the AHEC report. Most concerns focused on the ethical significance of cloning in itself, as is shown in arguments that cloning for reproductive purposes infringes human dignity. The ethical significance of the objectives for which cloning might be pursued is shown in concerns about the effect on notions of the family, individuality and concepts of identity. The ethical significance of the circumstances in which cloning for reproductive purposes might occur is reflected in the strongly expressed concerns about its safety.

No Medical Need For Cloning for Reproductive Purposes

6.21 Scientists who gave evidence agreed generally that cloning for reproductive purposes would be 'unethical, unsafe and should be prohibited'.¹⁸ They were also generally emphatic that there is no medical

¹⁸ For example, Professor Serjeantson from the Australian Academy of Science stated that both the Academy and AHEC agreed in believing that 'reproductive cloning to produce human foetuses was unethical and unsafe and should be prohibited', *Transcript*, p.79 and AAS,

79

need or medical justification for cloning for reproductive purposes. Professor Trounson, for example, stated that he:

...would like to assure the Committee that the scientists working in this area have very strong feelings that the cloning of the human person, or reproductive cloning, is not something we think is medically justified ... We are very firmly against reproductive cloning or the cloning of people.¹⁹

- 6.22 In Professor Trounson's view 'you would have to say that [cloning for reproductive purposes] is for selfish reasons. You want to replace a child who died or, for some other reason, you want to see yourself as a cloned individual'.²⁰
- 6.23 Professor Williamson emphasised to the Committee that the Murdoch Children's Research Institute 'unequivocally' sees:

...no medical reason that could justify reproductive cloning. We have considered this. We deal with every one of the genetic and acquired genetic disorders in Victoria. We are responsible for this and can see no justification.²¹

6.24 Professor Short shared this opposition to cloning for reproductive purposes.²²

Infringement Of Human Dignity

6.25 The most common reason given for regarding cloning for reproductive purposes as unethical was that it would be 'contrary to human dignity'.²³

Submissions, p.S245. Professor Felix Beck stated 'in general terms it is widely accepted that the cloning of a human being is unacceptable', *Submissions*, p.S683

- 19 Professor Alan Trounson, Transcript, pp.3, 4
- 20 Professor Alan Trounson, Transcript, p.17
- 21 Professor Robert Williamson, *Transcript*, p.8
- Professor Roger Short, *Transcript*, p.7. The Human Genetics Society of Australasia also stated that it 'cannot see any circumstance either medical or social, which would make the cloning of an individual desirable'. In the Society's view this included the risk of mitochondrial diseases for which 'other reproductive strategies are possible and ethically preferable', *Submissions*, p.S508. In his submission Professor Trounson also noted that the Australian Society for Reproductive Biology and the Fertility Society of Australia (which represent the scientific and medical staff involved in work in the areas of human infertility and IVF) have passed resolutions stating that 'cloning human persons is not an appropriate scientific or medical activity', *Submissions*, p.S170. The Australian Research Council also agreed that 'independent of ethical issues, the ARC can see no valid scientific reasons to carry out reproductive cloning', *Submissions*, p.S225
- 23 George W Marshall and Marie T Marshall, Submissions, p. S209. See also Mrs Pauline Burke, Submissions, p.S713; Mrs O'Donohue, Submissions, p.S223; The Royal College of Nursing, Submissions, p.S283; the Caroline Chisholm Centre for Health Ethics, Submissions, p.S488; Mr Klaus Clapinski, Submissions, p.S279; Dr David Gawler, Submissions, pp.S623 and S626; Right

This was generally because its projected objectives would involve the use of people as the means to an end decided upon by someone else and not as an end in themselves. A similar concept was expressed by those who argued that cloning for reproductive purposes would turn people into commodities.²⁴

6.26 Dr Pike of the Southern Cross Bioethics Institute explained what he understood by 'respect' and 'dignity':

Respect refers to the condition or state of being esteemed or honoured. It is to prize or to value, and furthermore it includes in its meaning to refrain from interfering with or to spare.... Dignity ... implies an inherence of value or quality which is intrinsic to, in this case, human beings... It is the dignity attached to humanness per se... It is this deep-seated inherent dignity which underscores the human rights documents and various codes of medical ethics which mark all human kind as worthy of the highest respect.²⁵

6.27 For Dr Amin John Abboud:

... any research, procedure or investigation that affects the dignity of people which we have defended at length in society is to be discouraged. Cloning attacks fundamentally the dignity of the human person making him subservient to the needs of others.²⁶

6.28 Dr Eloise Piercy submitted:

The cloning of human beings, whether to bring about the birth of a baby or to be suppressed within early embryonic life (such as for the purpose of obtaining embryonic stem cells) is an affront to human dignity. ... Clones are a means to an end and in being such, are treated with less dignity than other humans. Indeed, unconditional respect for human dignity, regardless of age, size, intellect or physical capacity is the cornerstone of civilised society. Human cloning contravenes this respect and violates the

to Life Australia, *Submissions*, p.S166; Ovulation Method Research and Reference Centre of Australia, *Transcript*, p.34

24 For example Mr Sidhu of Youth Concerned with Cloning stated that cloning for reproductive purposes was 'commodification where the status of a human being goes from that of a unique special individual with inherent dignity to that merely of a complex cellular structure and something that can be bought and sold', *Transcript*, p.30 and Youth Concerned with Cloning, *Submissions*, p.S543. See also Dr Eloise Piercy, *Submissions*, p.S582

²⁵ Dr Gregory Pike, *Transcript*, p.32. Dr Nicholas Tonti-Filippini also provided a lengthy submission which focused on reasons why UNESCO and other international bodies consider cloning to be contrary to human dignity. His submission also explores the meaning of the concept of 'human dignity', *Submissions*, pp.S595-604

²⁶ Dr Amin John Abboud, Submissions, p.S641

81

principles of equality and non-discrimination among human beings. It represents a line we should not cross.²⁷

6.29 The Social Responsibilities Committee of the Anglican Diocese of Melbourne seemed to reflect the views of many in saying that the

... central ethical issue in cloning is the widely accepted moral principle that human beings may never be treated merely as a means to an end, but only as an end. Many of the suggested reasons for reproductive cloning that might be employed have a strongly instrumental character to them, for they contemplate bringing a person into existence for reasons outside the person themselves. Examples would be the replacement of a lost relative or the making available of compatible tissue for transplanting into another.²⁸...

It is not the genetic identity but the human act of control that is the crucial point in this argument regarding the unacceptability of cloning. It is this act of deliberate control which makes us morally responsible for the decision which we have made. ... It is the element of control which provides a fundamental ethical case against human cloning. ... By definition, to clone is to exercise unprecedented control over the genetic dimension of another individual ...²⁹

6.30 The Catholic Archdiocese of Melbourne acknowledged that 'Australians approach ethical issues from a variety of perspectives' but said that 'some basic "common morality" is a necessary underpinning of our community life and the flourishing of each individual within our community'.³⁰ One such common principle:

... is respect for the inherent dignity of every member of the human family from which their equal and inalienable rights are derived.³¹

6.31 The General Synod of the Anglican Church of Australia submitted the Committee should recognise:

... the reverence in which the human person and the human body as constituent parts are held from a variety of religious and secular

²⁷ Dr Eloise Piercy, Submissions, p.S581

²⁸ Social Responsibilities Committee of the Anglican Diocese of Melbourne, *Submissions*, p.S305

²⁹ Social Responsibilities Committee of the Anglican Diocese of Melbourne, Submissions, p.S303

³⁰ Catholic Archdiocese of Melbourne, Submissions, p.S518

³¹ Catholic Archdiocese of Melbourne, Submissions, p.S518

perspectives and adopt social policy and legislation which reflects the sacredness and inviolability of the human person.³²

- 6.32 Allied to this concern the Australian Family Association asked whether we are 'playing God with cloning? Are there certain things we should not interfere with?'³³
- 6.33 The Executive Council of Australian Jewry regarded this as the 'theological question' but argued:

... cloning, which is based on pre-existing human genetic material, is not humans playing God but using God-given material, albeit not through normal methods of procreation... [E]very medical intervention represents interference with Divine providence and the physician is regarded in Judaism as doing God's work.³⁴

The Council went on to say that although:

... Judaism does not therefore say that cloning is prohibited in itself ...[it] advises one to pause before one permits that which can lead down a variety of slippery slopes.³⁵

The Council therefore supported prohibiting the cloning of whole human beings.

6.34 The ethical argument against cloning for reproductive purposes on this ground was encapsulated in the submission by Ridley College:

Human dignity is affirmed by a wide range of religious and secular traditions. Since human dignity is not only innate, but also relational, it may be violated or threatened when an individual does not experience being valued or treated as worthy in herself, but rather is treated as merely a means to some further end ... Another way of expressing this concern is in terms of the danger of commodification of children...³⁶

The Effect Of Cloning For Reproductive Purposes On The Family And Personal Relationships

6.35 Significant social issues arise from the possible creation of whole human beings by artificial means such as the use of somatic cell nuclear transfer techniques. Because such persons could be developed in a laboratory,

36 Ridley College, *Submissions*, pp.S33 and S34

³² General Synod of the Anglican Church of Australia, Submissions, p.S340

³³ Australian Family Association, *Submissions*, p.S697. See also Daniel and Jenny Garrard, *Submissions*, p.S123 and Robyn Hipkiss, *Submissions*, p.S183

³⁴ Executive Council of Australian Jewry, Submissions, p.S727

³⁵ Executive Council of Australian Jewry, Submissions, p.S728

through fusion of the nucleus of a somatic cell with an enucleated egg, the resulting person need have no connection with any family or other social structure (indeed the providers of the somatic cell and the egg may be dead). This raises questions such as who would be allowed to create such people, who would be responsible for the resulting person, who would have the right to make decisions in relation to the person's welfare and/or upbringing and what duties governments and the broader society would have towards the person. What are the consequences for a person of being created without clearly understood social connections? Where and how would such a person find a place within our society? The potential social consequences of such a development are far reaching and complex. They have not yet been properly considered by the community and the Committee has serious misgivings about them. These social consequences are at least as significant as the concerns surrounding the safety of cloning techniques highlighted in Chapter $3.^{37}$

- 6.36 The suggested effect of cloning for reproductive purposes on personal relationships and the family was one of the most common reasons for regarding cloning for reproductive purposes as unethical. For many people, such concerns were closely related to those about the lack of respect for human dignity implied by cloning for reproductive purposes.
- 6.37 Two reasons were advanced generally as to why cloning for reproductive purposes would have an adverse effect on human relationships and the family:
 - the almost identical genetic nature of the cloned person to the person who was the source of the somatic cell would distort our understanding of human relationships. Related to this were concerns about the maintenance of individuality and what kind of identity a cloned person would have; and
 - the asexual nature of cloning for reproductive purposes would have an adverse effect on personal relationships and family formation.
- 6.38 In relation to the effect on our understanding of human relationships of the genetically almost identical nature of the cloned person to the genetic donor, the Australian Family Association posed a number of questions:

What will become of relationships? Primarily what is a clone? Is he or she a child or a sibling to the donor? Is the donor a mother, father, guardian, sibling, representative or what? Would the parents of the donor be the clone's actual parents? What will clones do to family relationships and definitions... clone relationships will only further unravel the family unit.³⁸

6.39 For the Queensland Bioethics Centre:

To clone a human being is to bring into existence a new human being and at the same time deprive that human being of the normal relationships which characterise new members of the human family, namely genetic, gestational and social relationships, a web of relationships which we characterise as being a family. ... In the process of cloning a human being this being is deprived *through the choice of others* of having parents. Even the person who supplies the genetic material is more an older sibling (a kind of twin) than a parent [emphasis in the original].³⁹

6.40 The Caroline Chisholm Centre for Health Ethics submitted that cloning:

...would deprive the child of the genetic basis of father, mother and other family relationships which are very significant and important for every human individual since these pertain to the core of our personal identity in the general community ...⁴⁰

6.41 Dr Nicholas Tonti-Filippini was also very concerned about the effect of cloning for reproductive purposes on human relationships more generally. The potentially very distant relationship between the clone and anyone else is particularly problematic. He points out that the connection between the source of the tissue and the person cloned may be very tenuous (or non-existent if the source of the tissue is dead).⁴¹ In his view:

...cloning fragments the interconnectedness of human beings, because it allows a human being to be created without direct connections with a family.⁴²

6.42 The Social Responsibilities Committee of the Anglican Diocese of Melbourne expressed similar concerns:

³⁸ Australian Family Association, Submissions, pp.S695-696

³⁹ Queensland Bioethics Centre, Submissions, p.S708

⁴⁰ Caroline Chisholm Centre for Health Ethics, *Submissions*, p.S488 and Rev Dr Norman Ford, *Transcript*, p.30. See also Queensland Right to Life, *Submissions*, p.S264; Dr David Gawler, *Submissions*, p.S627; Australian Family Association, *Transcript*, p.111. The Council for Marriage and the Family said that 'the principle of the family being a sanctuary of life is at stake. It is this sanctuary which is about protecting the child and family members. The family is the basic community of society which is unique and unrepeatable... The family is where a child will come to experience the meaning of human dignity, care, love and acceptance regardless of their abilities. In circumstances involving cloning this knowledge is distorted', *Transcript*, p.37

⁴¹ Dr Nicholas Tonti-Filippini, Submissions, p.S594

⁴² Dr Nicholas Tonti-Filippini, Submissions, p.S604

Cloning appears to undermine this structure of the family. Cloning allows the separation of the sex act from the intimacy of the relationship, and brings a genetic difference from other humans who have genetic contribution from two parents. Only one partner would be necessary and this would undermine the basis of the genetic mixture that occurs naturally. Such a change has the potential to distort the relationship ...⁴³

- 6.43 In this context a particular concern for many people was that a possible consequence of the use of cloning for reproductive purposes would be the capacity it would offer same-sex couples to have children.⁴⁴
- 6.44 The asexual nature of human reproductive cloning and the effect of this on human and family relationships drew significant comment. Several submissions quoted Professor Leon Kass' statement:

... asexual reproduction does violate nature's boundaries, confounds the understanding of normal human relationships and reduces human beings to mere products to be manufactured at another's will and for another's purposes.⁴⁵

6.45 The Australian Catholic Bishops Conference expressed the view that the wide ranging issues arising from cloning:

...need to be seen in the context of the consistent teaching of the Church (espoused also by many fellow travellers) about the dignity of procreation and its central place in marriage ... this practice [of cloning for reproductive purposes] distorts the human meaning of procreation, which is no longer considered or practised for reproductive reasons but programmed for medical and experimental (and therefore commercial) purposes.⁴⁶

The practice of cloning, the Conference went on to say:

...is encouraged by the progressive depersonalisation of the generative act (introduced by the practice of extracorporeal fertilisation) which becomes a technological process making the

⁴³ Social Responsibilities Committee of the Anglican Diocese of Melbourne, *Submissions*, p.S301

⁴⁴ See Social Responsibilities Committee of the Anglican Diocese of Melbourne, *Submissions*, p.S301; Pro-Life Victoria, *Submissions*, p.S674; Right to Life Association NSW, *Submissions*, p.S502; the Catholic Archdiocese of Melbourne, *Submissions*, p.S512

⁴⁵ Leon Kass, 'The Wisdom of Repugnance', *The New Republic*, 2 June 1997. This article was also cited in the AHEC report, Chapter 3, paragraph 3.28. Kass' article was also referred to by Dr David Gawler, *Submissions*, p.S628; Australian Catholic Bishops Conference, *Submissions*, p.S745. Pro-Life Victoria also submitted that 'cloning is asexual in a more radical sense than IVF', *Submissions*, p.S674

⁴⁶ Quoting from Centre for Bioethics of the Catholic University of the Sacred Heart, Milan, 'Can Human Cloning be Therapeutic', Australian Catholic Bishops Conference, *Submissions*, p.S755

human being an object to be used by anyone who can reproduce him in the laboratory.⁴⁷

6.46 The Coalition for the Defence of Human Life seemed to sum up many of the arguments in this area:

Humans are bodily beings. Their understanding of themselves includes ideas that are biological: humans are the kinds of beings that are sexually generated, the kind of beings that have mothers, grandfathers, aunts, brothers and sisters, etc. This is, so to speak, the biological basis of our common understanding of human equality, the human family, and mutual human obligations. Any procedure that seems to depersonalise human reproduction weakens the biological basis of these important ideas, by introducing a radical inequality between some humans who are manipulators and manufacturers, and other humans who are artefacts, objects, products, commodities.⁴⁸

Identity And Individuality

- 6.47 Related to the broader concern about the effect of cloning for reproductive purposes on human relationships were more specific concerns about the potential for cloning for reproductive purposes to be seen to diminish individuality and lead to problems of identity for cloned persons (especially ones produced for any of the reasons outlined in paragraph 6.16 above). These more specific concerns are also, of course, related to the argument that cloning for reproductive purposes would infringe human dignity.
- 6.48 Pro-Life Victoria, for example, argued that regarding each individual being as 'unique' has 'underpinned the way in which our society values human life'.⁴⁹ Cloning for reproductive purposes, however, means that a cloned human being would be 'deliberately created to be identical genetically to another human being'.⁵⁰ The resultant lack of individual genetic identity, it argued, may lead a child to face confusion, bewilderment, tension, self-consciousness and psychological problems 'relating to individual identity and incompleteness'.⁵¹ Pro-Life Victoria also expressed concern that acceptance of children may then become conditional.⁵²

⁴⁷ Australian Catholic Bishops Conference, Submissions, p.S755

⁴⁸ Coalition for the Defence of Human Life, Submissions, p.S269

⁴⁹ Pro-Life Victoria, Submissions, p.S670

⁵⁰ Pro-Life Victoria, Submissions, p.S673

⁵¹ Pro-Life Victoria, Submissions, pp.S673-674. See also Dr David Gawler, Submissions, p.S626

⁵² Pro-Life Victoria, Submissions, pp.S673-674

- 6.49 The Human Genetics Society of Australasia regarded cloning for reproductive purposes as ethically unacceptable not only because the 'scientific and medical consequences are currently unknown', but also because it 'would reduce the autonomy of the child who has been cloned, particularly if the genome of the person cloned replicates that of an existing adult or child (intergenerational cloning) or if multiple clones are generated...^{'53}
- 6.50 The argument that cloning for reproductive purposes would necessarily undermine individuality and identity was, however, disputed by Ridley College, among others. It argued that concerns about loss of individuality and identity rested on an assumption that uniqueness and individual identity require a unique genome. In its view this is not the case and it cited the example of identical twins who have identical genomes but usually develop into completely distinct individuals.⁵⁴ Dr Nicholas Tonti-Filippini agreed with this criticism and argued that concerns about identity and individuality have little basis in scientific fact⁵⁵ but he did point to the existence of what he called 'cultural genetic determinism' and the expectations society may have of people with nearly identical genomes.⁵⁶
- 6.51 Both the Catholic Archdiocese of Melbourne and the Social Responsibilities Committee of the Anglican Diocese of Melbourne submitted that concerns relating to identity and individuality were but one reason, among many, for exercising great caution in these matters. The Catholic Archdiocese of Melbourne submitted:

Reverence for the sacredness of human life and of the family counsel both *inventiveness* and *caution* in interventions involving human beings and especially in experimentation upon them. In particular, concerning human cloning, respect must be shown for the *integrity of the person* in his or her fundamental nature and unique identity, for the *shared nature and diversity of the human family*, for *human life in its origins*, and for *human fertility and parenthood* [emphasis in original].⁵⁷

6.52 The Social Responsibilities Committee of the Anglican Diocese of Melbourne stated:

... no-one knows what would be the effects on human identity and relationships of creating someone who is the twin of their father or

57 Catholic Archdiocese of Melbourne, Submissions, p.S519

⁵³ Human Genetics Society of Australasia, Submissions, p.S508

⁵⁴ Ridley College, *Submissions*, p.S31

⁵⁵ Dr Nicholas Tonti-Filippini, Submissions, pp.S592-593

⁵⁶ Dr Nicholas Tonti-Filippini, Submissions, p.S595

mother, but born in a different generation and environment. ... There are sufficient uncertainties for applying the precautionary principle.⁵⁸

Safety

- 6.53 A prominent cause for concern about any prospect of cloning technology being applied to the reproductive cloning of humans was the safety of the procedure.⁵⁹
- 6.54 Professor Beck noted that 'even if it proved possible to adapt the technology to the human, the medical risks at present would be excessive'.⁶⁰ The Consumers Health Forum also submitted that it had taken into account the views of the Australian Academy of Science and the Murdoch Institute For Research into Birth Defects which both considered that cloning for reproductive purposes would be likely to be medically unsafe.⁶¹
- 6.55 The Humanist Society of Victoria supported a ban on reproductive cloning of human beings out 'of concern for the safety of the procedures and the physical outcomes of the nuclear transfer method'.⁶²
- 6.56 Queensland Right to Life noted that publicity about cloning makes:

... no mention of cloning mistakes. Previous experiments with animal cloning have resulted in mutations, premature ageing of the animal and transmission of genetic defects. The "pro-cloning" literature speaks as if it could only produce good results.⁶³

6.57 The Social Responsibilities Committee of the Anglican Diocese of Melbourne considered that:

There are sufficient unknowns about physical problems in pregnancy with cloned sheep and cattle to suggest that human cloning experiments would violate normal medical ethics. There is no experiment that could be done to prove the safety of human

⁵⁸ Social Responsibilities Committee of the Anglican Diocese of Melbourne, *Submissions*, p.S304

⁵⁹ The scientific evidence on this issue was discussed in Chapter 3 at paragraphs 3.15-3.19

⁶⁰ Professor Felix Beck, Submissions, p.S683

⁶¹ Consumers Health Forum, Submissions, p.S761

⁶² Humanist Society of Victoria, Submissions, p.S151. Others to oppose cloning for reproductive purposes on grounds of safety included the Women's Action Alliance (Vic), Submissions, p.S782; Dr Eloise Piercy, Submissions, p.S582; Dr David Gawler, Submissions, p.S623; Professor Roger Short, Transcript, p.27; Ridley College, Submissions, p.S32 and Dr David Elder, Submissions, pp.S195-196

⁶³ Queensland Right to Life, Submissions, p.S264

cloning without causing serious risk to humans created in the process.⁶⁴

6.58 The National Caucus of Disability Consumer Organisations also argued:

The many failures prior to the so-called "successful" cloning of Dolly must occasion significant caution. Clearly Dolly may also have been regarded as having impairment—created by the very technology which is supposed to have been therapeutic in bring[ing] her to life. Yet because the media was so focussed on the technological determinist message, it forgot critically to ask what right we as a society have to use a technology which occasions the limitations and harms experienced by Dolly—what society would call a disability... [The technology] will also reinforce stereotypes which see disability as a condition to be avoided at all costs rather than being treated and supported.⁶⁵

6.59 The Coalition for the Defence of Human Life criticises the Australian Academy of Science for recommending that 'reproductive cloning to produce human fetuses is unethical and unsafe and should be prohibited'. The Coalition stated it:

... is unethical in the first place *because* it is unsafe. Dolly the sheep was the sole survivor out of 277 sheep embryos. In the interests of science, such odds may be acceptable in sheep; in humans they would be entirely unacceptable.⁶⁶

Eugenics And Diversity

6.60 Some, such as Professor Beck, expressed concern about the potential for cloning for reproductive purposes, if permitted, to reintroduce the concept or practice of eugenics.⁶⁷ Professor Felix Beck argued that 'if at all widely practised the exercise would constitute a gross extension of the discredited "principles" of eugenics current before the Second World War ... '⁶⁸ The Queensland Right to Life also saw cloning as introducing 'other highly contentious philosophies [for example] eugenicism—cloning can be used to select for various characteristics and potentialities'.⁶⁹

⁶⁴ Social Responsibilities Committee of the Anglican Diocese of Melbourne, Submissions, p.S304

⁶⁵ National Caucus of Disability Consumer Organisations, Submissions, p.S775

⁶⁶ Coalition for the Defence of Human Life, Submissions, p.S269

⁶⁷ Eugenics is a term used to describe an applied science that seeks to improve the human race by application of the principle of selective breeding. William Outhwaite and Tom Bottomore (eds), *Blackwell Dictionary of Twentieth-Century Social Thought*, Blackwell, Oxford, 1993

⁶⁸ Professor Felix Beck, Submissions, p.S683

⁶⁹ Queensland Right to Life, Submissions, p.S264

6.61 Concerns were also raised about the implications of cloning for reproductive purposes for Indigenous people and people with disabilities. The Consumers Health Forum agreed that cloning for reproductive purposes is 'ethically unacceptable':

...disability and indigenous communities, in particular, are concerned that developments in gene technology promote a narrow view of "normality" rather than valuing diversity...⁷⁰

6.62 The National Caucus of Disability Consumer Organisations submitted:

Regardless of our views of the status of the embryo, fetus, zygotes and human tissue, there is no doubt that there are significant public concerns at a variety of developments involving genetics and cloning. Issues for people with a disability include the exclusion of our perspectives from many ethical debates and the way in which our bodies are often the site for intended therapy, and yet rarely are our voices sought or heeded in the development of technology.⁷¹

Potential For Coercion

6.63 Some, such as Dr Eloise Piercy, also pointed out the implications of cloning for reproductive purposes for women. Dr Piercy raised the 'serious potential for coercion' caused by the requirement for ova and the requirement that women gestate foetuses in order for such cloning to occur.⁷² Ridley College also submitted:

...that women's bodies would be required as sources of ova and of wombs for gestation of cloned individuals (whether they are allowed to develop to term, or sacrificed at some stage). A person cannot be isolated from her body, and therefore the "use" of a woman's body is an exploitation of her whole person... There is a real danger of the commodification of women's bodies ...⁷³

IS THERE SUPPORT FOR CLONING FOR REPRODUCTIVE PURPOSES?

6.64 The evidence revealed meagre, if any support in Australia for cloning for reproductive purposes.

- 71 National Caucus of Disability Consumer Organisations, Submissions, p.S774
- 72 Dr Eloise Piercy, Submissions, p.S582
- 73 Ridley College, Submissions, p.S34

⁷⁰ Consumers Health Forum, Submissions, p.S760

6.65 The Committee is aware that arguments in support of the reproductive cloning of whole human beings have gained some currency overseas since the inquiry commenced. In the United States, for example, some have argued that to prohibit cloning for reproductive purposes would infringe reproductive freedom.⁷⁴ Some submissions suggested it was possible that views on this matter might change in the future. Professor Beck argued:

... it is possible to imagine situations in which cloning procedures carried out to produce whole human beings might be considered socially acceptable.⁷⁵

- 6.66 These situations might include the prevention of the transmission of mitochondrial diseases⁷⁶ and Professor Beck urged that 'we do not serve the cause of humanity by closing our minds'.⁷⁷
- 6.67 Only one or two people expressed any support at all for cloning for reproductive purposes. Gerald Calvert stated:

I see nothing wrong with the act of cloning anything, providing it is to someone's advantage, and to no one's disadvantage apart from the unborn, who ultimately will be suppressed in favour of the living. God, if he exists is responsible for it being possible to clone anyway. If he doesn't, then does it really matter?⁷⁸

6.68 Dr David Swanton was very critical of the AHEC report. His view, in summary, is that:

... the only sound, objective, non-discriminatory, argument taking a universal point of view against human cloning is that of safety, and when the safety of the technology has been resolved (to be as safe as for example IVF technology) no valid ethical argument would then remain against human cloning.⁷⁹

6.69 The Committee strongly disagrees. It is clear that a concern about the safety of cloning for reproductive purposes is not the only ground on which opposition to cloning for reproductive purposes may be based and this chapter has outlined those other arguments in detail.

- 78 Mr Gerald Calvert, Submissions, p.S46
- 79 Dr David Swanton, Submissions, p.S114

⁷⁴ The Consumers Health Forum cited this argument in its submission but rejected its application in the Australian context on the basis that the risks involved outweigh any potential benefits, *Submissions*, p.S761

⁷⁵ Professor Felix Beck, Submissions, p.S683

⁷⁶ Professor Felix Beck, Submissions, p.S683

⁷⁷ Professor Felix Beck, *Submissions*, p.S684. Dr Loblay considered that at some future time there may be pressure from certain groups to use this technology for reproductive purposes but that *'current* community values are such as to make this unacceptable [emphasis in original]', *Exhibit* 8

CONCLUSIONS

- 6.70 The Committee finds no case has been made in favour of cloning for reproductive purposes. There is no evidence that views have changed on this matter since submissions were provided to the Committee. In fact, indications are that public opposition to cloning for reproductive purposes may have increased given the reaction to media announcements of the intention of some individuals overseas to attempt to clone a whole human being.
- 6.71 The Committee agrees with the emphatic opposition to cloning for reproductive purposes that was expressed in the evidence to the inquiry.
- 6.72 The Committee believes that cloning for reproductive purposes is unacceptable. While the Committee holds this view unanimously, individual members reached this conclusion for a variety of reasons encompassing ethical, medical, legal and/or social considerations.
- 6.73 The Committee emphasises that these conclusions are equally applicable to the use of any future technologies for the purpose of the artificial creation of whole human beings.⁸⁰
- 6.74 The Committee also believes that currently there is no good reason to allow manipulation of the germ line.

⁸⁰ The Committee reiterates that these conclusions do not extend to existing *in vitro* fertilisation and assisted reproductive technologies, such as IVF and GIFT