

Human Cloning and Disability

A talk
given by Alison Davis
at the SPUC
National Conference
September 2001

*The Handicap Division
The Society for the Protection of Unborn Children,
5, St. Matthew St. Westminster, London SW1P 2JT*

I expect that many people here will have shared my initial relief on hearing news reports in April that the Government planned to "*ban human cloning*."¹

Ruth Deetch, Chair of the Human Fertilisation and Embryo Authority went so far as to say that cloning is "*illegal in Britain and should remain so*."² It seemed as if our fears that cloning would be allowed were, after all, not to be realised, and that human embryos would be saved from being created specifically to be destroyed in the process of being used for the

¹ "Britain to ban human cloning" *BBC News Online* 19 April 2001

² "Cloning of humans 'is bound to fail' by Mark Henderson and Richard Owen. *The Times* 10 March 2001

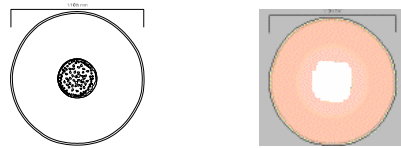
benefit of another person. Sadly our relief was misplaced, and we were misled - cloning will be allowed.

However, there has been so much obscuring of the facts, many people are not quite sure any more what "*human cloning*" really is, why "*human cloning*" is being promoted, what is to be allowed. "*Cloning*" actually means asexual (that is, non-sexual) reproduction or genetic replication, so that offspring are created with only one genetic parent. A clone is a genetically identical copy of the individual whose cell was used in the cloning process.

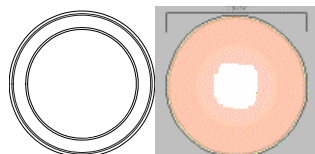
Of course, usually each individual human life begins when the mother's egg is fertilised by the father's sperm, and pro-lifers acknowledge that from that moment the human being has an absolute right to life. In the case of cloned individuals, their life begins when the effect of fertilisation is achieved by human manipulation.

There are several ways in which cloning can be done, but the method most likely to be used is this:

- 1) An unfertilized human egg is taken and the nucleus is removed (this nucleus contains the half set of genes that would need another half-set from a sperm in order to be fertilized)



- 2) A cell is then removed from an adult and placed against the egg which now has no nucleus.



A small spark of electricity is passed across the two cells fusing them into one

- 4) The egg is "fooled" by the spark into acting as if it had been fertilised by a sperm, and begins to divide rapidly, in the same way as any normally fertilised new embryo, providing an identical "twin" to the to the person who provided the cell used in the process.

Cloning has already been performed in animals, the most famous example being Dolly the sheep, the first surviving clone of an adult animal who was born in February 1997.

The reason cloning is such an attractive proposition to many people is that embryos contain many potentially very useful cells, known as "*stem cells*." Unlike the vast majority of human body cells, stem cells have the ability to renew themselves and to form or differentiate into different cell types needed by the body, for instance, skin, muscle, liver, brain cells, heart tissue cells etc. Stem cells could be used to replace tissue destroyed by disabling conditions such as Parkinson's disease, Alzheimer's disease, heart failure and osteoporosis.

To make these stem cells completely compatible with the cells of the patients who would receive them, the idea is to obtain them from an embryo cloned using the patient's own cells. This would completely eliminate problems of rejection, which can arise when tissue from another person is transplanted into the human body.

Stem cells can also be obtained from sources other than cloned embryos, and these can have as much potential for alleviating disabling conditions as cloned embryonic stem cells.

Predictably, this hasn't prevented scientists who are in favour of using cloned embryos from ignoring the promising research on alternatives.

Prof. Robert Winston, for instance, has said that cloned embryo stem cell research is "*the only way possible*" to achieve the desired results. This is not actually the case.

There have been many confusing media reports recently, stating that cloning will be "*banned*"³ which is actually the opposite of the truth.

Indeed, it is rather like the sign one often sees in America - "*Fine for parking*" which actually means NOT that it is "*fine*" to park there, as it seems to say, but that you will get a "*fine*" if you do!

The truth is not only that human cloning is *not to be "banned"* - in fact, it is being promoted vigorously both by the Government itself and by scientists (who want to see if it is possible, and to use cells from cloned embryos to treat various disabling conditions).

Much has been made of the supposed distinction between what are presented as two types of cloning: "*therapeutic*" cloning and "*reproductive*" cloning.

It is important to understand that these are NOT actually two different types of cloning. The method of producing the clone would be the same for both "*therapeutic*" and "*reproductive*" cloning.

The human status of the resulting embryo would be the same in both cases. The only difference would be how the cloned embryo is treated. The reality is that all cloning is "*reproductive*" since all cloned embryos are the result of "*reproducing*" the individual who wants to be cloned. In

³ "New law will close loophole on human cloning" by David Charter. *The Times* 16 April 2001

"therapeutic" cloning, the human embryo would be created or used only so that his or her stem cells could treat the person who provided the cell for the cloning process.

In the process of these cells being removed, it is almost certain that the embryo would be destroyed.

I say *"almost certain"* because, recently, there has been some speculation that individual stem cells may have the potential to repair themselves and become whole embryos again. However, this is, at best, only a theoretical possibility, and it is clearly completely unethical to use human embryos for the benefit of others, regardless of whether or not they *"may"* be able to repair themselves.

In *"reproductive"* cloning the cloned embryo would be implanted in a woman and allowed to develop and eventually be born.

Thus, the only difference between the supposed two types of cloning is what would be done with the cloned individual: whether she or he would be allowed to live or be destroyed in the process of being used for the benefit of others.

When the Government spoke of introducing legislation to *"ban human cloning"* they meant only *"reproductive" cloning* (allowing a clone to develop and be born).

By referring to *"reproductive" cloning* as *"human cloning"* the Government strongly implied that *"therapeutic" cloning* is not *really* cloning at all.

To facilitate this idea, deliberately misleading and apparently neutral terms such as *"cell nuclear replacement"* and *"stem cell research"* have been used to obscure the fact that what is being proposed is actually human cloning. *"Stem cell research"* is simply what scientists plan to do with cloned human embryos; *"cell nuclear replacement"* is just the method used to produce the cloned embryos.

All this confusion about words rather reminds me of Humpty Dumpty, who famously said, *"When I use a word it means just what I choose it to mean - neither more nor less."* This is, of course, the way to a situation where words have no fixed meaning at all, making it impossible for anyone to understand what another person is saying. The correct approach, in my view, is that of the English tutor to the last Emperor of China, who taught his pupil that, *"If you cannot say what you mean, you will never mean what you say."*

Widespread acceptance of embryo cloning for *"therapeutic"* purposes has been very swift, pushed along by a Government, which was in favour of it from the start.

In June 2000 a Report was issued by an

"expert group" set up by the Government, and chaired by the Chief Medical Officer at the Department of Health, Prof. Liam Donaldson.

The Committee was asked to assess the "anticipated benefits" of research using cloned human embryos, and all the members of it were heavily biased in favour of cloning from the beginning. The main recommendation of the Report produced by the Committee was that :

Research using embryos (whether created by in vitro fertilisation) [ie IVF] or by cell nuclear replacement [ie cloning] should be permitted..."

The report made it clear that the Committee recognised that this research wasn't intended to benefit the embryos themselves at all, but to benefit others.

In Japan and Canada, recently, there have been reports of research projects aimed at curing disabling conditions by using stem cells from "spare" embryos left over from IVF, which the Donaldson Committee said should be allowed, rather than from embryos cloned specifically for research⁴ This was presented as "more ethical" than cloning embryos for research, but, of course, using and killing embryos is equally unethical however they are obtained.

In November 2000 every MP was contacted by the British Medical Association, and also by the Department of Health, pressing them to accept the arguments in favour of allowing cloning. The Dept of Health Memorandum said:

The Government has accepted the recommendations (of the Donaldson Committee) and will lay regulations to extend the purposes for which embryos may be used in research"

This was necessary because the Human Fertilisation and Embryology Act of 1990 allows research on human embryos up to 14 days old only for five specified purposes, which don't include cloning. The Act would have to be extended to include a sixth specified purpose that of allowing "therapeutic" cloning. On December 19th 2000 MPs voted by 366 votes to 174 in favour of the Government's proposals for "therapeutic" cloning. It was passed on to the House of Lords, who voted on 22nd January 2001 by 212 votes to 92 to allow human cloning for supposedly "therapeutic" purposes.

In a move that was simultaneously tragic and comical Lord Hunt of Kings Health, Parliamentary Under Secretary of State in the Dept of

⁴ "Japan close to allowing stem cell research" and "Guidelines approved: Research on cloning humans would be strictly banned" by The Associated Press. *National Post* 2 August 2001

Health and Lord Walton of Detchant proposed the idea that a Select Committee should be set up *after the principle of allowing human embryo cloning had been approved*. Lord Alton rightly compared this to a Court hearing a prisoner's defence only *after* the verdict and sentence had been passed.

Nevertheless, the Lords approved it, and the Select Committee, whose deliberations are widely anticipated to be a foregone conclusion, was set up.

Yvette Cooper, Parliamentary Under-Secretary of State for Health has actually stated in the House of Commons that a "*safeguard*" to "*abuse of the law*" is that cloned embryos would be subject to the same regulations laid down by the Human Fertilisation and Embryology Act 1990 as other embryos used for research, notably that they must be destroyed 14 days after their creation.

It adds insult to injury to suggest that killing cloned embryos is a "*safeguard against abuse*." It is *in itself* abuse of the very worst kind.

Despite all the attempts to calm public fears, in fact, the public seem to be very much opposed to any cloning. In an article, which actually took a strong pro cloning stance, The Independent noted that most people are "*vehemently opposed*" to it⁵.

A report published by The Wellcome Foundation (which strongly favours allowing "*therapeutic*" cloning) noted that public opinion specifically on "*therapeutic*" cloning is generally supportive until people realise exactly what it means - at which point they express "*concern and apprehension*."⁶

This concern about cloning seems to be worldwide. President Chirac of France has called for an international ban on all forms of human cloning⁷, and France adopted a draft law to ban "*therapeutic*" cloning in June, President Chirac stressing that priority should be given to finding alternatives to cloning embryos⁸.

A poll in the USA found that 72% were opposed to "*therapeutic cloning*" and 80% opposed "*reproductive cloning*."

A Council of Europe convention prohibiting "*the creation of beings which are genetically identical to one another*" came into force in March 2001, signed by 29 countries and updating the European Convention on Bioethics of 1997⁹.

⁵ *The Independent* 20 August 2000

⁶ *Unveiling the Human Genome: A First Draft* Wellcome News Supplement 4, 2001

⁷ "Chirac critical of Britain over cloning of embryos" by Mark Henderson. *The Times* 9 February 2001

⁸ "French woman aged 62 has brother's baby" by Charles Bremner *The Times* 21 June 2001

⁹ "Surgeon prepares for human cloning" by Richard Owen. *The Times* 9 March 2001

Ignoring this groundswell of opposition, those who support cloning always cite the possibility that destructive research using cloned human embryos may provide what they call "*exciting new therapeutic possibilities*" as a reason for allowing it¹⁰.

Yvette Cooper said cloning could...*prove to be the Holy Grail in finding a cure for cancer, Parkinson's disease, diabetes, osteoporosis, spinal cord injuries, leukaemia, Alzheimer's (disease) and multiple sclerosis*¹¹.

Mike Dexter of the Wellcome Trust similarly stated that: *Stem cell research is about life - the potential to cure or create healthier lives for the diabetic, the leukaemia patient, the Parkinson's sufferer or stroke victim*¹².

All this enthusiasm made it sound as if cloned embryo stem cell research will be a panacea for all human suffering.

Those with long memories (or perhaps who are getting a bit long in the tooth, like me) will remember all too well the similar claims that were made back in 1990 when pro-lifers were faced with just the same arguments which were then made in favour of allowing research on "*spare*" human embryos, left over from the IVF process.

Such research was eventually enshrined in the 1990 Human Fertilisation and Embryology Act. A Memorandum sent by the Royal Society to all MPs in April 1990 said,

*Legislation prohibiting further research on human embryological material would, at worst, altogether prevent certain advances in medical treatment of great potential benefit to the infertile or those carrying serious genetic disorders. At best, it would suspend such advances before their full development ... The Royal Society therefore strongly supports (allowing research*¹³).

Since 1990 between 300,000 and half a million human embryos have been used in research with no apparent benefits at all to disabled people or those who are infertile.

The only actual result of this research has been the development of the technique of preimplantation diagnosis, or embryo screening, which entails detecting a predisposition to genetic disability, or the disability itself, in IVF embryos before they are implanted in a woman's womb, and

¹⁰ See, for example, the Dept. of Health Memorandum: "Background information on stem cells and the proposed Human Fertilisation and Embryology (Research Purposes) Regulations" November 2000 para. 13

¹¹ "Disabled MPs plead for cell stem research" by Melissa Kite *The Times* 16 December 2000

¹² "MPs pressured over human embryo vote" by Melissa Kite. *The Times* 19 December 2000

¹³ Speech by Dafydd Wigley MP in the Second Reading Debate in the House of Commons of the Human Fertilisation and Embryology Bill. 2 April 1990

throwing away those affected - which could by no stretch of the imagination be said to "benefit" either the discarded embryo or disabled people generally.

There is no guarantee that "therapeutic" cloning will provide the promised cures, any more than "spare embryo" research did. Indeed transplanting cloned embryo stem cells into people with, for instance, Parkinson's disease, may cause unpredictable and damaging side effects.

It was reported earlier this year that there were "disastrous" side effects of transplanting cells from aborted babies into the brains of people with Parkinson's disease. In about 15% of patients, the implanted cells apparently grew too well, giving out so much of a chemical controlling movement that they writhed and jerked uncontrollably. The researchers said there was no way to remove or deactivate the transplanted cells¹⁴.

However, the desperation of some suffering people to be cured is being manipulated now, as it was prior to the 1990 legislation, as an argument in favour of destructive research, while disabled people who disagree with using their fellow human beings as commodities are ignored.

Peter Macaluso, a new SPUC Handicap Division member, who has the incurable condition Chronic Lymphocytic Leukaemia wrote in a letter to The Times:

I wish no lives ... to be sacrificed to find a cure for my disease¹⁵.

Similarly, Gwendoline Long, who has had Parkinson's disease for 12 years wrote in the Daily Telegraph:

I would not ...accept any treatment that involved the use of aborted fetuses or cloned embryonic tissue, or any other morally bankrupt solution. Should I do so, I think I would die of immorality.

On a personal note, I was recently diagnosed as having osteoporosis, another incurable condition often cited as being one that could be "helped" by transplants of cloned embryonic stem cells. I find it outrageous that it could even be suggested that I want to be treated with cells from my fellow human beings who have been deliberately created only to be destroyed - supposedly for *my* benefit.

It is a great pity that our legislators don't share the revulsion felt by Peter and Gwendoline and me, and all the members of the SPUC Handicap Division.

¹⁴ "Cell Therapy for Parkinson's Disease" by Gerald D. Fischbach MD and Guy M. McKhann MD
The New England Journal of Medicine Vol. 344, No. 10, 8 March 2001

¹⁵ Letter to *The Times* 1 February 2001

In both the House of Commons and the House of Lords debates much was made of the "potential" of stem cell research to cure disabling conditions, and attempts were made to justify the destruction of human embryonic life by promising "benefits" for suffering people. For instance, Lord Hunt of Kings Heath said:

*The human embryo has a special status and we owe a measure of respect to the embryo. We also owe a measure of respect to the millions of people living with these devastating illnesses and the millions who have yet to show signs of them*¹⁶.

In similar vein, Lord Habgood said:

The respect we owe (human embryos) doesn't necessitate absolute protection and it can be satisfied by a strictly controlled use of them.

If showing "respect" to a human being includes creating and then destroying them for the benefit of others, I would very much prefer to be treated with "disrespect!"

A US Company called Advanced Cell Technology is now discussing whether we should even use the term "embryos" for embryos created by cloning. Apparently, some members of the Company "believe that since it is not produced by fertilization and is not going to be allowed to develop into a fetus, it would be useful to call the cells something less inflammatory than an embryo"¹⁷. "Funny that no one has noticed before now the "inflammatory" nature of the scientific term "embryo."

The Chair of the ACT's misnamed "Ethics Advisory Board" has actually said that "These are not embryos." He favours calling them "activated eggs" while other members of the Board have suggested the terms "ovasome" (blending the words for "egg" and "body") or "nuclear transfer-derived blastocyst"¹⁸, suggesting that how we intend to use a particular entity determines its nature.

This sort of thing sends us straight back to Humpty Dumpty, and words meaning what the speaker says they mean. Humpty has a lot of company in his view.

Lords Hunt and Habgood say that "respect" for an embryo can be demonstrated by killing it for the benefit of another, and for a disabled person by attempting to cure him or her by dismantling and killing another human being.

¹⁶ "Peers divided by test on embryos" by Melissa Kite *The Times* 23 January 2001

¹⁷ "The Amazing Vanishing Embryo Biobabble" by Douglas Johnson, legislative director of the National Right to Life Committee *National Review* 17 July 2001

¹⁸ Ibid.

The "Ethics Board" of Advanced Cell Technology think they can make the cloning of human embryos acceptable if they pretend human embryos are not *really* embryos.

The Human Fertilisation and Embryology Authority thinks embryo research, first allowed by the 1990 Human Fertilisation and Embryology Act has shown "*benefits*" for disabled people because it is now possible to examine IVF embryos in the laboratory, and to throw away any found to have, or carry, a disability.

I'm led to believe what the 17th Century (and, coincidentally, blind) poet John Milton said:

*When the language in common use in any country becomes irregular and depraved, it is followed by its ruin and degradation*¹⁹.

It's not only words that have been manipulated to mean something completely opposite to their true meaning. It is also concepts, and ideas, which have been used to manipulate public opinion into thinking that a responsible view is being taken of embryo research, that it will have "*huge benefits*" and that there will be "*appropriate safeguards*."

Yvette Cooper (Parliamentary Under-Secretary of State for Health) has made a lot of the fact that human embryonic stem cell research would be "*strictly controlled*." She said in the House of Commons debate that:

*Of course, embryo research should not be allowed for just any old thing. That is why the regulations specify serious disease. We are not talk about the common cold, but spinal injuries, burns, osteoporosis, cancer, heart disease, about serious disease and disability ... I agree that where alternatives exist, embryos should not be used in research*²⁰.

Looking at it on her terms for a moment, it is difficult to see why the regulations should limit research to "*serious disease and disability*" if, in fact, there is nothing wrong with research on cloned human embryos. If they are simply useful collections of cells which do not qualify for human rights, why *shouldn't* we use them for curing the common cold, or, indeed, to use her words, "*any old thing?*"

On the other hand if, as we acknowledge, embryos, whether cloned or not, are really human beings who are at an early stage of development, how can it be justified to "*use*" them at all?

We do not allow other human beings to be "*used*" for someone else's benefit - indeed slavery is everywhere condemned as immoral.

¹⁹ Quoted in "Sophie's Dictionary: Where the Bishop makes up the meanings" *The Times* 10 June 1999

²⁰ House of Commons debate on the Human Fertilisation and Embryology (Research Purposes) Regulations, 19 December 2000, *Hansard*, Col. 260

Making an exception for those who are the most vulnerable seems totally contrary to the basic human instinct to protect those who are least able to defend themselves, as in the injunction to rescuers at sea "*women and children first.*"

Yvette Cooper also mentioned that it could be 30 years before any benefit from embryonic stem cell research might be seen - assuming that it is ever seen.

Even the estimate of 30 years seems to be a figure plucked from the air, as she went on to say that "*we do not know how long it will take*" to see any benefits.

The ironic thing about all the enthusiasm for destructive cloned embryo research is that there have recently been huge numbers of research projects reported which use stem cells from entirely ethical sources. Just to mention a very few of them, American scientists claim to have tracked down "true" stem cells in adult bone marrow, which have regenerative powers greater than any previously found. They say: *These multi-talented stem cells can sprout lung, skin, stomach and intestine cells .. (and they) may be comparable to embryonic stem cells*²¹

On 24th July 2001, Researchers in Rostock, Germany, announced that two weeks previously they had successfully transplanted stem cells from the patient's own bone marrow into the heart of a man with heart disease, who is reportedly doing very well.²² Cells from liposuctioned fat (dubbed "North America's most plentiful resource") have been transformed into bone, muscle, and cartilage.²³ Another US team have shown that human muscle tissue from the arm or leg can be injected into the heart, where they begin to function in the same way as heart cells²⁴.

A Japanese team claim to have discovered that a naturally produced human protein can stop the death of brain cells in people with Alzheimer's disease, a development that could eventually be used to cure the disease²⁵.

And in a very interesting development, the Scottish firm PPL Therapeutics, that helped clone Dolly the sheep, announced that it had successfully taken a skin cell from an adult cow and returned it to its embryonic state, a process known as de-differentiation.

They say it may be possible to achieve the same result with adult human cells, thus avoiding the destruction of human embryos while still

²¹ "Lifelines: True stem cell found?" By Helen Pearson *Nature* 4 May 2001

²² "What you're not told about stem cells" by Michael Fumento *National Post* 28 July 2001

²³ Ibid.

²⁴ *National Post Online* 31 May 2001 quoted in SPUC International News Digest 1 June 2001

²⁵ *ABC News* quoted in SPUC International News Digest 23 May 2001

obtaining embryonic stem cells which could be used for treating or curing disabling conditions²⁶.

Research like this could achieve the same, or better, results as cloned embryonic stem cell research without any ethical problems.

Because of the claimed abhorrence of allowing "*reproductive*" cloning (that is, allowing a cloned embryo to be implanted in a woman's womb, develop and grow and eventually be born,) it is important to consider the very real possibility that it could happen.

In an unintentionally rather funny statement against allowing reproductive cloning Prof. Robert Winston, Britain's most famous "*fertility expert*" said,

"*The idea that somebody might do that to a human being is actually - when you think about it - unthinkable*²⁷."

Unfortunately, it is not just being "*thought*" about but actually being planned as a reality.

Professor Severino Antinori a scientist from Rome, and Panos Zavos, an American Professor, unveiled their plans for reproductive cloning before the National Association of Sciences in Washington in August. They have 1,300 couples in the USA, 200 in Italy, and "three or four" British couples who want to be cloned, and they plan to start cloning human embryos in November 2001²⁸

. Earlier in the year Prof. Antonori actually thanked Tony Blair for his "intelligent decision²⁹" to allow "therapeutic" cloning, saying that without Britain's lead, his own plans for "reproductive" cloning would not have been possible.³⁰

There has been much speculation about what the status would be of human clones, with suggestions that they would not be "fully human." While we oppose the deliberate creation of clones, recognising that it is not right to engineer human beings, the fact remains that *natural* clones are already among us - and we think nothing of it. Identical twins are clones of each other, because the embryo splits very early in its development to become two apparently identical individuals. The difference between this and manufactured cloning of course, is that natural twins do not come into being so one can serve as a "*replacement*" or as the source of compatible tissue for the other.

²⁶ "New technique may help create stem cells without using embryos" by Gautam Naik and Antonio Regalado. *The Wall Street Journal* 3 August 2001

²⁷ *The Canberra Times* 15 May 2001

²⁸ "Italian Doctor ready to clone humans." *The People's Daily* 7 August 2001

²⁹ "The sordid isolation of Britain" by Daniel Johnson. *The Spectator* 28 July 2001

³⁰ "I'm not a monster" by Richard Owen *The Times* 20 February 2001

There are many instances of one twin being mistaken for another (Shakespeare was particularly fond of basing plays on them) but my favourite is the primary school teacher in the Hebrides, who had identical twins in her class.

One day one of the children in the class had been sick, and the teacher wanted a volunteer to accompany him to the sick room. She turned to one twin, and asked, "*Are you squeamish?*"

Being so used to having to explain who he was, he replied in a resigned tone of voice, "*No, Miss, I'm Hamish.*"

Identical twins can certainly look the same, but this is to some extent deceptive. They have different fingerprints, and often have completely different personalities. This would, also, be true of clones produced using a cell from a living adult, and perhaps in this case would be more marked, given the completely different environment in which they would grow up.

Cloned people would share the same status, dignity and infinite value as every other human being, but this does not alter the fact that it is not consistent with human dignity to seek deliberately to form a person in this way.

It is also suggested sometimes that cloning might be used to "replace" a person who has died. This philosophy is not new, since it has long been suggested that suffering can be "*avoided*" by aborting a disabled baby and "*replacing*" him or her with a non-disabled one³¹, suggesting that one child is much the same as another, and that the non-disabled baby will have all the characteristics of the child killed except disability.

This is an extremely offensive suggestion, and one doomed to failure since children are not interchangeable, and one child cannot "*replace*" another. This idea was behind the thinking of Alan and Louise Masterton of Dundee, who went to Italy to have IVF treatment enabling them to choose to have implanted only a female embryo. They have four sons and were attempting to "*replace*" their daughter Nicole, who died in a bonfire accident aged 3, but in the event the only successfully fertilised embryo was male, so they gave him away to another couple.

Such attempts to "replace" one human being with another would be bound to proliferate if reproductive cloning were allowed, which is why it is so crucial that we continue to insist that being produced specifically to

³¹ "Congenital diseases often cause many years of ill health so that, if an abnormal pregnancy is aborted and the parents have another healthy child who would otherwise have never been conceived, considerable suffering is avoided. Even allowing for the anxiety of testing, the unpleasantness of abortion, and the occasional miscarriage of a normal baby, many people feel that the gains outweigh the side-effects. There may also be economic gains to the rest of society." In "*Should Health Screening be Private*" by Dr. Jim Thornton. Office of Economic Affairs 1999

be a genetic carbon copy of another person is certainly not in the best interests of any human being.

Many problems have been reported with reproductive cloning in animals. It took 277 attempts to clone a sheep before Dolly was born - 277 embryos who died in the attempt to produce her, not to mention all the embryos who died in the process of developing the technique of cloning.

If "reproductive" cloning were allowed in humans it is likely that similarly large numbers of embryos would die - in the process of developing the technology and because experience in animals shows that many cloned embryos and fetuses die, for no apparent reason.

It has been reported that up to 98% of cloned mammals have "*bizarre*" genetic anomalies ranging from "*grotesquely oversized fetuses to malformed organs and development glitches*" leading some scientists to say, "*it's wrong and should be illegal to court such disasters*"³².

Indeed, recent work by a team of biologists at the Massachusetts Institute of Technology has shown that although cloned mice show no clear flaws in their genetic make-up, they do reveal problems in expressing their seemingly normal genes.

The team traced this problem not to the cloning process itself, as they had suspected, but to the original embryonic stem cells that were used to help create the mice. The problem occurred because the stem cells were inherently unstable³³.

Such problems with the way information in genes is manifested in the body are difficult to detect and add to the dangers of cloning. This work also casts some uncertainty on the safety of embryonic stem cells being used in "*therapeutic*" cloning.

The American team say their work with mice is "*a warning to scientists that they must be very cautious in handling embryonic stem cells, (which) may not be normal in a physiological or functional sense*"³⁴.

Despite all these pitfalls, reproductive cloning is regarded as attractive even by some of those who ostensibly agree it should be banned.

For instance, Ruth Deetch, Chief Executive of the HFEA at the first hearing of the House of Lords Select Committee on Stem Cell Research said that British scientists who went overseas to perform types of human

³² "Reasons not to clone." Editorial. *The Washington Post* 1 April 2001

³³ "Hidden Flaws" by Amanda Onion. ABC News 5 July 2001

³⁴ Ibid.

embryo research not allowed in Britain would not be blacklisted, but could in fact return home to "*continuing acclaim*"³⁵."

If "*reproductive*" cloning is considered so unethical as to be banned here, it is totally irresponsible and unethical to "*acclaim*" those who do such things elsewhere. It also smacks of hypocrisy, and at least an ambivalent attitude towards the "*ban*" in this country.

It's likely that once they have grown accustomed to cloning embryos for "*therapeutic*" reasons, researchers will then start to try to persuade politicians of the supposed "*benefits*" of "*reproductive*" cloning.

There have already been reports of pressure to allow this from couples where both partners are infertile, and pressure from people who have a high chance of having children with sex-linked disabilities, quite apart from the British couples who are among those seeking to be cloned by Profs. Antinori and Zavos.

These people may, well, find it difficult to understand why it would not be allowed, since it's already been agreed by Parliament that cloning of human beings is acceptable as a means to *some* ends. And if *some* ends, why not *other*, apparently equally compelling ends?

The whole question of embryo research really comes down to a very simple question: What is the nature and status of the human embryo?

The House of Lords Select Committee on Stem Cell Research, in its guidelines for sending submissions, made a very telling and significant comment about this. The Committee stated that it "*does not propose to review the underlying basis of the 1990 (Human Fertilisation and Embryology) Act*" thus making it clear that it would not, in fact, be considering at all the fundamental ethical issue of the nature and status of the human embryo.

This is reminiscent of the statement made in the Report of the Committee of Inquiry into Human Fertilisation and Embryology, chaired by Dame Mary Warnock in 1984, the Report which laid the groundwork upon which all destructive embryo research is based. That Report said:

*Although the questions of when life or personhood begin, appear to be questions of fact susceptible of straightforward answers, we hold that the answers to such questions, in fact, are complex amalgams of factual and moral judgements. Instead of trying to answer these questions directly, we have, therefore, gone straight to the question of how it is right to treat the human embryo*³⁶.

³⁵ House of Lords Select Committee on Stem Cell Research: First Hearing 23 April 2001 (SPUC eyewitness to the evidence.)

³⁶ Report of the Committee of Inquiry into Human Fertilisation and Embryology chaired by Dame Mary Warnock, 1984, N. 11.9

It is, of course, impossible to decide how to treat a particular entity without first establishing its nature. Suppose for instance, someone tells me they will bring me "*an entity*" next week, and that I must "*deal with it appropriately.*" Before I can decide whether to feed it, eat it, bury it, sell it or give up my bed for it I have at least to decide two things: what is its status - is it a human being? An animal? A plant? An inanimate object? If it is not an object, is it alive? Without that information, it is impossible to decide how to treat it properly.

I have been involved in the pro-life movement for 20 years now, and remember well that the question of "*When does human life begin?*" started to be scrutinised in minute detail prior to the 1990 HFE Act.

At that time, many pro-experimentation scientists, journalists and politicians gave what they thought were three "*compelling*" arguments in favour of using human embryos.

The first was that human embryos were very small (typically printed articles would refer to them being "*no larger than the full stop at the end of a sentence*") and that therefore using them in a destructive way was acceptable. This argument was rather reminiscent of the Punch cartoon of the pregnant chambermaid, dismissed for having an illegitimate baby who said "but it's only a very small one ma'am."³⁷

The reality, of course, is that human beings are human beings, whatever their size, and that babies' disruptiveness tends to be inversely proportional to their size!

The second argument used was that so many human embryos die prior to implantation that destroying a few more didn't really matter, an argument which has also been used to justify "*therapeutic*" cloning. This argument is like saying that since every person will eventually die, it doesn't much matter if I murder someone - after all, she or he would have died eventually, wouldn't they? The third argument often used was more complex and was particularly relevant to the issue of cloning. It was said then that as human embryos occasionally divide at an early stage to produce identical ("*monozygotic*") twins, this showed conclusively that the early embryo is only a "*collection of cells*" and not an individual - how can it be an individual, the argument went, if it may split and become two individuals?

This argument rested on the idea that whatever is an individual cannot give rise to other individuals, and seemed to many in 1990 to be quite plausible.

Now, however, that argument is undermined by the very possibility of human cloning. Anyone who is now a human individual, could give rise to

³⁷ Quoted in Hansard 8/3/89

other human individuals by cloning, while remaining completely unchanged themselves.

The difficulty some people have with considering embryos as *real* human beings, is that they look different - the same problem behind all prejudice whether on grounds of race, disability or age.

Jonathan Glover, Director of the Centre of Medical Law and Ethics at King's College London has said that: *It is implausible that embryos have a full right to life. It is not possible to share a joke with an embryo*³⁸, a quite terrifying judgement. If the ability to share a joke is the determinant of human rights, of course, many people would lose out - those who are too young to understand, those with profound learning disabilities, the elderly with dementia, and even those who don't share a common language - or a common sense of humour for that matter.

On the other hand, sometimes the truth slips out unintentionally. An article on Professor Ian Craft, a leading IVF doctor, said: *The first time that Ian Craft saw Nourah, Kahled and Khalil Ma'ave they were four cells under a laboratory microscope. Sixteen years and several billion times larger, Britain's first IVF triplets were yesterday reintroduced to the man who made their existence a reality*³⁹. The article was right to point out that the triplets are the same individuals now as they were when they were four cells in the laboratory.

And since this is so, it is surely as wrong to dismantle and destroy, or deliberately replicate human embryos, whatever the purpose of doing so, as to dismember, kill or clone any of us.

Pro-lifers need to be in the forefront of arguing that some activities ought never to be tolerated, and that pity and compassion for one group of human beings should not lead to ignoring the needs and rights of another group.

There is a certain irony here: Millions of pounds are now being expended on research to facilitate destructive human embryo research to cure people like me.

Yet many of the very same scientists, journalists and politicians who advocate such research, also believe that lives like mine have only relative, not absolute, value and can also be ended shortly after conception by preimplantation genetic diagnosis, before birth by abortion, after birth by "allowing" the baby to die by sedation and starvation to death, and at any time after that by euthanasia.

³⁸ Embryology Working Party advice to European Parliament & Council of Europe, quoted in speech by Stuart Hornett, Law Lecturer at Leicester University on *Embryo Experimentation and Europe*. SPUC annual conference Newcastle University 21 September 1991

³⁹ "Sixteen years on, IVF triplets return to lab" by Oliver Wright *The Times* 22 August 2000

All this negativity and sacrifice of human life ultimately stems from a misunderstanding of the infinite value of human life, and a vain attempt to attain the unattainable - human perfection.

Sometimes it can seem that whatever we do, cloning will happen, and there is little we can do to stop it.

The situation reminds me of a wonderfully confusing roundabout in France with two exits, one labelled "*toutes directions*" (all routes) and the other "*autres directions*" (other routes). When everyone seems to be going one way, we need to have the courage to choose the "*autres directions*" path and insist that the truth is told that cloning is not compatible with human dignity or the infinite value human beings have, and that "*therapeutic*" cloning means that death is added to the insult of cloning for the human embryos used in this way.

"*Curing disability*" is always given as the justification for allowing human cloning. Of course, I'm not suggesting that it isn't a good thing to seek treatments and cures for disabling conditions, provided always that the means used are ethical. But unless all the human beings involved in producing the cures are fully respected, the cures are not worth the price.

A vast amount of money is being spent on destructive research, but little attention is paid to the fact that: one simply cannot put a price on the value of a human life, created only to be exploited and abused to benefit another. To suggest that one can, really, is, as Oscar Wilde dubbed it,

"*the arithmetic of those who know the price of everything and the value of nothing*⁴⁰."

⁴⁰ "The Picture of Dorian Gray" by Oscar Wilde

