Mr Justice Nicholson, the Chief Judge of the Family Court, commented on the role of the legislature and the judiciary in the abortion issue. He was reported by *The Age* on 21 July 1989 as saying:

> It seems to me it is an area that will just have to be addressed. Whether it is to be addressed by the legislature or the courts is another question. I think there is probably a strong argument that the legislature ought to give some guidance to it. I think in a sense they are hoping the courts will do it for them, and it gets back to the philosophical question, who ought to make the law, the courts or the Parliament?
>
> I would have thought most people would recoil from the concept that you could not prevent an abortion taking place when the baby was almost at term. If you say that, it means it does involve a degree of recognition at some stage of the pregnancy of the rights of the unborn child. Those are the issues that haven't been addressed.
>
> *The Age* reports that Justice Nicholson also commented on whether an Act of Parliament can cover all the issues:
>
> No, says Mr Justice Nicholson, judges will always have to make decisions in each particular case. 'But the simple statement, what right if any does the foetus have, could be addressed by Parliament. You could say, for example, that abortion would not normally be permitted after a certain stage of pregnancy, you could not have it without leave of the court. The difficult task would be to choose what stage.
>
> In this sort of area, which affects very basic issues in the community, I think that is one of the roles Parliament has, to make the laws. It just seems to be on an issue as basic as this, Parliament has to make a decision. It represents the people.' □

genetic manipulation

> Recombinant DNA technology is new and very difficult to explain, and usually not well explained in the media. It is definitely easy to get a quick headline and raise people's fear and very easy to mis-explain.
>
> Professor Max Charlesworth, reported in *The Age*, 14 September 1989.

The *Sun Herald* reported on 17 September 1989 that:

> Victoria's IVF pioneer and the head of the Centre for Early Human Development at Monash Medical Centre, Dr Alan Trounson, said germ cell gene therapy was not yet possible in humans, but he believes that it should be banned.
>
> Dr Trounson was commenting on a report by the Law Reform Commission of Victoria (VLRC) *Genetic Manipulation* (VLRC 26). He said:
>
> > It's something I feel very strongly about. We would prefer to see it completely out.
> >
> > Dr Trounson said similar experiments in animals had produced totally unexpected changes such as tumours, structural deformities and shortened life spans.
> >
> > He said the insertion of a new gene into human chromosomes could not be controlled and might lead either to changes which would worsen a patient's condition or produce serious genetic disorders which would only appear generations later.
> >
> > Dr Trounson rejected the suggestion that further research could make germ cell gene therapy safe and doubted whether such techniques could ever be shown to be safe.

However *The Age* stated that the VLRC report 'is a sober and rational assessment of science technology' (editorial, 14 September 1989). It called the report 'a landmark report' which 'accepts the view of the scientific community that genetic engineering is not intrinsically dangerous and should not be singled out for special regulation'. *The Age* editorial continued:

The Law Reform Commission's report 'Genetic Manipulation' is a sober and rational assessment of the technology itself, and of issues that have generated bitter debate between scientists and environmentalists overseas.

Australia has a strong involvement in genetic engineering, but so far has managed to avoid the legal and legislative confrontations that have tied up field experiments and commercialisation of transgenic organisms in the US and Europe.

The Commission's report offers a detailed analysis of the safety and ethical implications of modifying the genes of living organisms, and then releasing those organisms into the environment.

genes and their modification. The cells of organisms — humans, animals, plants and bacteria — contain *genes* which control their characteristics and function. Genes are composed of a chemical called DNA. Recombinant DNA technology enables a piece of DNA (part of a gene or a whole gene) from one cell to be excised and incorporated into the cell of another organism. The altered cell then functions differently as directed by the new DNA inserted into it. Pieces of DNA from plants, animals or humans may be transferred into bacteria or other organisms and 'grown' in large-scale fermentation cultures in order to make large numbers of copies of the DNA as the bacteria multiply and produce the gene product in quantity.

the benefits. Genetic manipulation has been undertaken in Australia for more than ten years. Already, there have been considerable benefits. Scientists have gained greater understanding of the structure and function of the cells that make up all living organisms, especially the mechanisms of inheritance. Vaccines and other biological products have been developed for use in human and animal health care. Some of these are new and are for diseases that could not previously be treated. Others are the same as products already in use, but can be produced much more cheaply and effectively. Genetic diagnostic tests can detect inherited disorders in humans and animals. They can identify carriers of genetic defects in 'at-risk' families. In the United States, the first steps towards treating people with genetic illnesses are now being taken and similar treatment will no doubt be attempted in Australia in the near future. Australian scientists have bred agricultural animals and plants with enhanced disease resistance and faster growth. Although still at laboratory stage, these have important commercial potential. New, or more effective, pesticides and herbicides are also being developed for use in agriculture.

theological objections. The VLRC report lists some objections to genetic manipulation. Some believe genetic manipulation is wrong because they believe it interferes with 'God's purposes'. They see scientists as 'playing God' by exchanging genetic material between vastly different organisms and by creating new organisms. However the VLRC report says leading US theologians at a Presidential Commission rejected such views in 1982.

non-theological objections. The non-theological objection to genetic manipulation is based on an assumption that one should not try to interfere with the natural evolutionary development of life. The VLRC report lists scientists' replies to such concerns. They say 'Planned breeding', strain selection, animal husbandry and plant breeding, have been practised by scientists and agriculturalists for centuries to improve species. DNA is not a 'sacred' substance; many genes can be made by purely synthetic procedures in a laboratory. Also, the transfer of a single gene, or even many genes, will not alter the nature of an organism. The only difference is that it will have an additional characteristic ie it may grow more

quickly or be more resistant to disease. The fears about crossing 'species barriers' assume that individuals within a species have identical DNA. That is not the case. Individuals within a species may have different DNA and that may change as organisms evolve. In fact, the degree of interference with evolution caused by recombinant DNA technology is insignificant when compared with that resulting from the effect of human activity on the environment. In any event, in biological terms there is no such thing as a preordained 'plan' for life on earth. Existing plant and animal species, including humans, have arisen by evolution or by selective breeding.

For these reasons the VLRC does not believe that genetic manipulation is wrong on either religious or ethical grounds. In its view, genetic manipulation is not intrinsically objectionable or so different from other laboratory procedures as to require special regulation.

genetic manipulation and human patients. Gene therapy to correct a deficiency in the gene structure of human patients could take two forms:

- *somatic cell gene therapy* would introduce a new normal gene into the patient's body, or 'somatic', cells. It would treat only the particular patient. The change would not be passed on to the patient's children.
- *germ cell gene therapy*, on the other hand, would introduce a new gene into the 'germ' or reproductive cells — sperm, eggs or fertilised eggs. The genetic change would then be inherited by the offspring of the treated person.

The VLRC report states that as far as the VLRC can determine neither type of gene therapy has yet been attempted in Australia. The National Health and Medical Research Council (NHMRC), for example, has said that gene therapy to make inheritable changes is ethically unacceptable 'because there is insufficient knowledge about the possible consequences, hazards, and effects on future generations.

The concern about somatic cell gene therapy is that it is an untested procedure and the possible risks are not known. The uncertainties of somatic cell gene therapy could be regarded as too great for its introduction. However, it can be argued that the diseases for which gene therapy will be used initially are themselves extremely serious, and other forms of treatment which have been introduced for treatment of serious diseases like cancers have also carried substantial possible hazards, the exact magnitude of which was not known at the time. The VLRC believes that ethics committees co-ordinated by the NHMRC, can effectively oversee human gene therapy.

safety and compensation. The VLRC report states that the vast majority of genetic manipulation experiments present little risk. Ordinary laboratory procedures are adequate for safe work. It states that the very small number that may be hazardous should be notified to the Department of labour so that risks can be assessed and work monitored.

The VLRC believes there is no justification for conferring special rights to compensation for people who are injured or who suffer property damage as a result of genetically altered organisms because the existing compensation procedures are adequate.

environmental issues. The VLRC report recommends legislation to control experimental releases of genetically modified plants, animals and microbes into the environment and that authorities should be notified of all proposed releases of genetically altered organisms into the environment. Anyone proposing a release should

notify the Genetic Manipulation Advisory Committee and any relevant State or federal government department. The supervisory government agency — such as the Victorian Department of Agriculture and Rural Affairs — should be required to conduct an environmental assessment before any release and to advertise the release proposals Statewide. This procedure will ensure that interested individuals can obtain information and participate in decision-making before the proposal is approved. □

surrogate motherhood

> I began receiving photographs of a beautiful, brown-eyed infant with chubby cheeks. He no longer looked exactly like his father as he did at the time of birth. Instead the top half of his face was identical to mine. Only then did I recognise the fact that he was my son, too. He would carry my genes with him from one generation into the next. And I had exchanged the right to ever see him again for $11 500.
>
> Elizabeth Kane, June 1988

controlled surrogacy. The National Bioethics Consultative Committee (NBCC) has issued a draft report on surrogacy in which it recommends that surrogacy arrangements should not be legislatively prohibited and should be controlled by uniform legislation. This conflicts with recommendations made by the New South Wales Law Reform Commission (NSWLRC) in its March 1989 report on Surrogate Motherhood (LRC 60).

no surrogacy. In its report the NSWLRC took the view that surrogacy should be discouraged by all practicable means available to the law because it is not in the interests of the community or the children created by its use for surrogacy to become a widely used method of overcoming infertility. For the same reason, the Commission also recommended that IVF surrogacy be prohibited.

The NSWLRC recommended that surrogacy should be discouraged because:

- it involves the deliberate creation of new life for the purpose of alleviating infertility;
- the body of woman is put to the service of the commissioning parties;
- the practice entails the planned separation of child and birth mother at a very early age and permanently;
- it ignores the interest of other members of the families of the participants;
- both the woman who is to act as the surrogate and the woman who commissions the child are placed at significant risk by the process because of the possibility of pressure being exerted on them to comply. Even in altruistic surrogacy arrangements there can be no guarantee that both women have exercised freedom of choice.

For a full discussion of the NSWLRC report see [1989] *Reform* 104.

why surrogacy should be permitted. The NBCC draft report states

- In summary, the central principle to be considered in relation to surrogate motherhood is that of qualified autonomy. This involves the right of procreative freedom, that is the right of a couple to make arrangements to form a family. However, the involvement of a third party in these arrangements, namely the surrogate mother, renders this right conditional. The same principle of personal autonomy can be applied to the rights of a woman to use her body as she sees fit, including the right to act as a surrogate mother if she so desires and freely consents.