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CANADIAN INSTITUTE FOR ADVANCED LEGAL STUDIES

THE CANBERRA LECTURES 1988

FIRST CANADA-AUSTRALASIA LAW CONFERENCE

APRIL 1988

"LAW, TECHNOLOGY AND THE FUTURE"

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LAW, TECHNOLOGY AND THE FUTURE*

The Honourable Justice Michael Kirby CMG**

THE LESSONS OF A LAW REFORMER

When I was at school, I mastered, like most participants in this Conference, my Latin ablatives. I knew what an alveolar fricative was and my declention of irregular German verbs was impeccable. Where I was weak was in science and mathematics. Slide rules were a mystery to me. I survived school days in blissful ignorance of Boyle's Law. Given half a chance the Minister (Mr Barry Jones) would explain it to me at last in exquisite detail.

In short, I was a typical lawyer-in-the-making. Strong in poetry. Weak in sums. Sadly, for lawyers of today's generation, poetry and words are not enough. This was brought home to me most clearly during the decade I served on the Australian Law Reform Commission. Almost every task of the Commission evidenced the impact of science and technology on the law. The great scientific developments of this century can be conveniently classified as three in number. I refer to nuclear

fission, informatics and biotechnology. Around these generic categories there cluster many other developments which evidence the remarkable inventiveness of 20th century scientists. They range from interplanetary space exploration through laser technology to all the other offshoots of quantum physics. Indeed, it has lately been suggested that all of these developments, in the three categories I have mentioned, can ultimately be traced to the developments of quantum physics that sprang principally from the mind of Erwin Schrodinger, working in Germany in the 1920's. It would be surprising if these scientific advances, coming at the one point in history, did not have a common link. But whether they are connected or not is hardly important for present purposes. Most lawyers know nothing of quantum physics. Few have ever heard of the remarkable Erwin.

I have said that virtually every task of the Australian Law Reform Commission involved one aspect or other of the impact of science and technology on the law. In the first project on criminal investigation, we had to consider the impact of photography and video tape on confessions to police,[1] the invasiveness of telephonic interception[2] and the use of telephones, in a continental country, to authorise police searches and arrests.[3]

In the succeeding project on drug dependency and motor vehicle accidents, we were obliged to consider the modern means of detecting, with the aid of science, the presence of drugs in the blood, breath and other tissues of drivers.[4]

In the next project on insolvency, consideration was given to the introduction of a national scheme for the repayment, by regular payments, of debts owed by consumer debtors, entitled to a statutory moratorium.[5] Through the use of electronic fund transfers, efficient arrangements could be made with the banks for the collection and repayment to creditors which would simply not have been possible a few years ago.

The next report on human tissue transplants took the Australian Law Reform Commission into the world of bioethics. When science overcame the body's immune rejection of foreign tissue, it became necessary for the law to establish its ground rules for the taking of body parts from one human being for use by another. When were people to be "dead" for the purpose of donations? Were "donations" actually necessary, or should we adopt a regime of presumed donation? Should coroner's cadavers be available for donation purposes as, it was discovered, they were frequently used at present? Should minors be entitled to donate or should the law protect them from bravado and intra-family pressures?[6] These and many other topics were dealt with in the report upon which Sir Gerard Brennan and I laboured together through many a stormy debate. The Commission, two years before the birth of the first child conceived in vitro, drew attention to some of the legal implications of that development.

So the list goes on. The national census raised concerns about privacy in the computerised records of personal data.[7] Proposals were made by the Law Commission for its protection. A

general inquiry on privacy law was commissioned. It produced a report, suitably enough in 1984, proposing a whole range of new laws to deal with the privacy concerns raised by informatics.[8] The advent of instantaneous electronic media of communications, spanning the continent by the satellite and terrestrial systems necessitated review of the law of defamation which had grown up in the pre federation environment of local slanders. This project, and the one on privacy, illustrate the extent to which, in Federal countries such as Canada and Australia, disconformity can be created by the constitutional division of powers. The Australian Constitution, notoriously unresponsive to amendment by popular referenda, reflects, in its terms, the technology of informatics of the time it was drafted, at the turn of the Century. Power is given to the national Parliament to make laws with respect to "postal, telegraphic, telephonic and other like services". The then new-fangled telegraph was assigned as a national responsibility. Mr. Bell's remarkable telephone was likewise so allotted. But it took the High Court of Australia years later to include radio and television broadcasting within "other like services".[10] Now the question is posed whether computers, not otherwise linked by orthodox telecommunications systems, are susceptible to like uniform Federal regulation.

The project of the Law Reform Commission on contempt law[11] required the Commission to consider where the modern balance is to be struck between the claim of an accused person to a fair trial, by a jury uncontaminated by pretrial publicity and the right of radio, television and other media outlets to

discuss associated questions of public importance. By their penetration of the community, the media may legitimately discuss matters of real public anxiety partly self created, but at a price that effectively deprives individuals of the right to a fair trial.[12]

Even the project on admiralty law reform, which might look at first blush to be a safe backwater of black letter law, requires consideration of the extent to which the regime, established in earlier times for sailing boats, may be appropriately extended to hovercraft, sea planes and, for that matter, international aircraft.[13] One by one the projects which engage the Federal and State law reform agencies of Australia demonstrate the impact of science and technology on our discipline. Nor is this an impact confined to the halls of academe or the bearded meetings of law reformers. On the contrary, cases are now increasingly coming before the courts which call attention to the developments of science. They alert this generation of lawyers to the likely patterns of the future. The lesson is that the lawyer of the future will not only have to be an economist and statistician. He and she will have a computer at the finger tips, and by satellite or other communications fight court room battles over the rights of in vitro children, deformed neonates or the divorce of a person who has undergone sexual reassignment.

We should take as our text, the warning of Jacob Bronowski the great science commissioner second only to our Science Minister but unlike him, sadly dead! To ignore the developments of science and technology is to turn our back on the really great issues of our time, and of times yet to come.

NUCLEAR FISSION

I now propose to illustrate (for no more is possible) some of the implications of the three scientific developments I have mentioned. The one posing the greatest challenge to law, international order and the survival of humanity is obviously nuclear fission. The present stockpile of nuclear weapons far exceeds the firepower necessary to destroy humanity. We tend to put this brooding question out of our mind as we go about our busy days construing statutes and drafting wills. Yet, unless the effort to bring nuclear weaponry under the effective control of international law is successful, the prospects for mankind must, in the long run be doubtful. Accident, mistake, derangement, terrorism and brinkmanship gone wrong pose terrible dangers. It is the gradual realisation of the comparative insignificance of other issues and the urgency of this one that has attracted increasing numbers of lawyers and scientists to bodies which seek to increase the sense of priority about tackling this entirely unprecedented problem.[14] In Canada Judge Maxwell Cohen has been a leading proponent of the laywers' responsibility about the nuclear threat.

Apart from this concern, which must be reflected by initiatives in international law and politics, there are domestic concerns as well. Even in the peaceful uses of nuclear fission, there are dangers for our legal system. Such are the risks in the technology that special powers are typically given to protect nuclear establishments.[15] When things go wrong, the dangers of radiation may not be confined to the one legal jurisdiction. News reports record claims by neighbouring

countries upon the Soviet Union for the losses consequent upon the Chernobyl nuclear power station mishap. It is reported that the International Atomic Energy Agency is belatedly drafting a new international agreement requiring early warning and emergency assistance in the case of nuclear accidents.

The decision of the Supreme Court of Canada in Operation Dismantle Inc & Ors v The Queen & Ors[16] illustrates the way in which popular concern about the destructive potential of nuclear technology may now be brought to the courts. In form, the case was one of an appeal on pleadings. But in reality the issue was the extent to which the Charter's provisions could be used to control an alleged increase in the risk of nuclear war resulting from the Canadian Cabinet's decision to permit testing over Canada of United States cruise missiles. Significantly, all judges of the Supreme Court rejected the Canadian Government's contention that Cabinet decisions in this regard were not reviewable by the courts under the Charter. Wilson, J specifically affirmed that the decision was not insulated from review because it was "a political question". She was prepared to go further than the majority and to contemplate circumstances in which a Government initiative in respect of nuclear weapons might contradict the Charter.[17] To most Australians this is simply a nonjusticiable issue - a matter for politicians. But in Canada the Charter's guarantee of protection of life may bring this vital concern into the courtrooms of the nation once again.

INFORMATION TECHNOLOGY

If we turn from the intractable problems of nuclear technology, we can see the way in which informatics provides a catalogue of challenges to the present legal system. By "informatics" I mean the merger of the technologies of computers and telecommunications. A number of implications of informatics for the law can be mentioned. The first is privacy. Whereas the common law did not develop effective protection for privacy as such[18], it is a value greatly valued in our society. Legislation has been enacted to offer protection, much of it stimulated by the advent of the new technology.[19] At the international level, guidelines and conventions have been drawn up to lay down the basic rules which will govern respect for privacy in the international movement of data.[20] But how such rules will be given force in courts of law, without complementary domestic legislation, is uncertain. The basic problem is that the technology of informatics has a tendency to render domestic law, traditionally expressed in terms of power over a particular territory, inconvenient or even irrelevant. The subject matter of the regulation is ubiquitious, pervasive and instantaneous. Lawyers from different traditions, looking at the same phenomenon will approach it from differing starting points.

Secondly, freedom of information (FOI) legislation has accompanied, and been stimulated by, the technological developments of informatics. This notable effort to reduce the secrecy of burgeoning government has so far been resisted, at the national level, in Britain.[21] It has succeeded in the

United States, Canada, Australia and New Zealand[22], although inquiries are presently proceeding which may diminish the right.[23]

There is a well known example, cited by Professor J. Bing of Norway which illustrates the way interactive technology impinges upon traditional domestic sovereignty. A Norwegian social researcher published certain findings on Nato defence arrangements. These were contained in documents restricted under Norwegian law. The researcher was convicted of espionage in Norway. But the documents had been retrieved on line pursuant to the United States Freedom of Information Act. As the recent Spycatcher litigation has illustrated once information is out in one jurisdiction it is virtually impossible to recontain it by court orders[24]. The moral is that the new information technology is likely to hasten the influence of openness of administration for the simple reason that it is rendered so much more difficult to contain the haemorrhage of freely available information, once its disclosure is lawfully permitted in one place.

Thirdly, computer crime and fraud require new attention. The problems presented in harmonising established criminal law with the nature of informatics include the considerations that crime is typically defined with strict precision and it is typically local, being confined to a particular jurisdiction. The manipulation of information technology may not come within the definition of "theft" contained in domestic law, which normally involves the taking away of goods. Nowadays, no goods need be taken.

In a number of the States of the United States, laws have lately been passed by which "property" is defined to include "information including electronically processed or produced data and computer software and programs in either machine or human readable form".[25] Case law in Canada is now beginning to grapple with this subject. In R v Stewart[26], a case in Ontario, now under appeal to the Supreme Court of Canada, an individual sought to obtain the names, addresses and telephone numbers of the employees of a hotel. These were protected by the hotel's security system. He approached a security worker and offered to pay for the protected confidential data. He was reported and charged, inter alia, with counselling theft of "information, the property of the hotel and its employees". At the trial he was acquitted. It was held that the information was not "property" as defined by the law of theft in Canada. In the Ontario Court of Appeal, a majority decision held that he was guilty of counselling "theft". The majority opinion was expressed thus:

> "While clearly not all information is property, I see no reason why confidential information that has been gathered through the expenditure of time, effort and money by a commercial enterprise for the purpose of its business should not be regarded as 'property'..."[27]

The dissenting judge put the other point of view:

> "[I]t is for Parliament to broaden the criminal definition of the property concept if the needs of modern Canadian society require it ... [T]he word "anything" used in s 283 [of the Criminal Code] must be defined and

> qualified within the context of property and ... confidential information does not properly fit within that context."[28]

A Bill to extend the Criminal Code definition of "property", expressly to include computer data and software, has been reported by a Parliamentary sub committee in the negative:

> "In our view it would be ill advised to grant a proprietory interest in information per se, something which does not exist even in the civil law. For reasons of public policy, the exclusive ownership of information which, of necessity, would flow from the concept of "property" is not favoured in our socio-legal system. Information is regarded as too valuable a public commodity to have its ownership vest exclusively in any particular individual."[29]

Difficulties are immediately posed by divergent approaches in Canada and the United States, with their systems often integrated by transborder data flows. The rapid development of telecommunications, especially by satellite, also integrates Australia into this problem. The tyranny of distance, which was once Australia's burden and protection, is now of diminishing importance.

Fourthly there are the issues of private international law. Whose legal regime is to apply to the diffuse international components of informatics transactions? Where an electronic message is generated in country A, switched in countries B and C, transits countries E, F, G and H, is processed in countries I and J, stored in country K and involves damage in yet other countries, it is clear that

present rules on the choice of law and for the resolution of conflicts of law are inadequate.[30]

Fifthly, there is the issue of sovereignty. The moves that a sovereign country can nowadays realistically take to protect itself in a world of interacting informatics are limited. An example is that of Dresser (France). It is a subsidiary of Dresser Industries of the United States. Overnight, it was denied access to a computer which stored the specifications for manufacturing components of pipeline equipment. In the result, the French subsidiary was unable to manufacture the equipment for the Trans Siberian pipeline objected to by the United States Government. It also lost a $3 million Australian order.[31]

Other illustrations of transborder access to data creating novel legal problems abound. One involves a Canadian bank. The Miami branch of the Bank of Nova Scotia was served with a subpoena by a US Grand Jury demanding production of the Bank's information held in its branches in Cayman Island and the Bahamas. The Bank was unable to comply because the information requested was protected by the laws of those Carribean countries. An application to the Cayman Island courts, seeking permission to release the information, resulted instead in an injunction to prevent it. In spite of this, the United States courts supported an application by the United States Department of Justice, and imposed a fine on the bank of $25,000 per day until the information was produced. The Canadian Government, both in diplomatic exchanges and in amicus curiae briefs in the US Court, asked what would be the United

States attitude if the Government (or even a court) of a Middle Eastern State in which the bank maintained an office issued an order, including sanctions, requiring the bank to disclose information concerning the alleged business relations between a customer of its Miami office and Israel.[32] The extra-territorial operation of laws, particularly laws of the United States of America, have caused legislative responses. The issue is partly a political one.[33] But the point is that the need for new rules is made more urgent by the integrated nature of information technology.

There are many other classes of problems which could be mentioned in this connection, including those of intellectual property law[34], business law, insurance and the law of evidence[35].

BIOTECHNOLOGY

If these issues of informatics appear daunting, the problems presented to the legal system by developments of biotechnology are even more troublesome for they touch still more fundamental questions of morality and raise the very nature of human life itself.

The cases which, so far, have come most frequently before the courts are those which concern the response of the law to the grossly deformed or retarded neonates. The law has tended against distinctions based upon respect for human life provided it has a minimum quality. Before the courts intervened, however, "compassionate infanticide" was a common practice in many hospitals. In recent years, there has been a series of cases in England[36], Canada[37], the United States[38] and

Australia[39] in which orders have been made requiring operations to be performed on neonates or young children, despite the disinclination of medical staff and the parents. Perhaps more significant than these orders were the words, in the leading English authority on this subject, which suggest that if the child's life is demonstrated to be "so demonstrably awful" and "filled with pain", the court might desist from ordering its preservation.[40] Who decides what is a "demonstrably awful life" - Why? Ultimately the courts.

Another series of cases presenting bioethical problems has arisen out of so called sex change operations which, until recently, would have been impossible. Perhaps the most celebrated is that of April Ashley.[41] By operation, she underwent the removal of a scrotum and penis and construction of a vagina. She lived exclusively as a woman. She married a Mr. Corbett. The relationship broke down and it fell to Ormrod, J to determine whether the marriage had been initially valid. By reference to a number of criteria, chromosomal, gonadal and genital tests, his Lordship concluded that April Ashley was not a woman and so could not marry. There have been a number of similar cases in Australian courts.[42]

In 1984 a medical case in Toronto shows what may now be achieved. Siamese twins, both genetically male were joined at the pelvis. They were separated and one was left with male genital organs. An artificial vagina was used for the other. Her male gonads were removed. But if the tests pronounced in April Ashley's case and Australian cases were applied by the Canadian courts, the "female" twin will be condemned by the law

to the prospect of a life without a valid marriage as an additional burden to the physical disabilities which nature has inflicted but which medical technology has struggled to overcome.[43]

To these issues must now be added the exotic questions posed by the actuality of in vitro fertilisation and foetal experimentation and the prospect of cloning of the human species and still further experiments with artificial conception.[44] In the case of in vitro fertilisation, an acute question was posed by a recent case in Australia. The genetic parents of a fertilised human ovum held in a hospital refrigerator in Melbourne were killed in a plane crash in North America. The parents were very wealthy. The question arose as to whether the fertilised ovum, which had a contingent potentiality for a human life, had "rights", which if necessary the law would enforce, to find a surrogate womb and, to be brought into this world in order to inherit the property. Recently, the Victorian Minister agreed to allow the thawing and implantation of the embryoes in another patient. This is just one of many such problems which may be presented by this remarkable new technique.

So far as surrogacy is concerned cases have already come before the English courts and legislation has been enacted (in Victoria and South Australia) or proposed (in England and Queensland)[45].

Even on the day of this presentation two problems of surrogacy have been mentioned in the Australian press. One involves the case of a Melbourne woman who has agreed, without

charge, to bear to full term for her sister the baby conceived by the implantation in her of the ovum of her sister and the sperm of her sister's husband. And in the much publicised baby M case in the United States, a judge is reported to have extended the rights of access by the surrogate to the child she nurtured and bore the child's genetic parents who were earlier ordered custody when the surrogate changed her mind. Such cases and problems are likely to multiply in the future.

GOOD AND BAD NEWS

These instances present news, both good and bad for our profession. The problems requiring legal resolution and legal reform will abound in consequence of the new technology. They will become ever more numerous, difficult and urgent.

To some extent the new information technology will enhance the capacity of the judiciary and the legal profession to bring justice more speedily and economically to more of our citizens. Word processors are now standard equipment in the offices of most attorneys. They have even reached the judiciary. The repetitious and standardised nature of many documents, pleadings and even advices makes word processors specially useful for legal practice, dependent as it often is on precedents. Even in the judiciary, though standardised judgments have not yet come to pass, word processors save time in the refinement, clarification, simplification and abbreviation of judgments, though this is not always or necessarily so. Pleas have been made that, before precedents of documents and pleadings are put on word processors, efforts should be expended to simplify them and to remove the

unnecessary, antique language of yesteryear. Otherwise, we will be hostage to that language for ever, embalmed as it will be in electronic memory.

Courts have already adopted informatics for the purpose of monitoring the efficiency of the throughput of cases. Computers can suitably program, simplify and expedite listing arrangements. One hundred and fifty years after the penny post, arrangements are now adopted to permit filing of documents in court by letter.[46] It can only be a matter of time before direct electronic filing and exchange of documents is common place. In the case of the courts, limited funds generally inhibit the use of the best and most up to date equipment. As for the Bar, it is often a reluctance to embrace new technology that has led to postponement of electronic decisions. Ironically, and perhaps even undeservedly, because of falling costs, such postponement may actually bring advantages.[47] There is a growing number of cases committed to on-line computer retrieval and the provision for computerised statutes which allow up to the minute presentation of the law in the place of those loose pages, so easily overlooked.

These developments promise the practitioner of the future, trained in the use of computers, a more efficient access to raw legal data. It may be hoped that use of electronics will be accompanied by an enhancement of judgment. Otherwise, in a mass of regurgitated material, practitioners will be deluged with single instances. They will then face the problem of deriving principles from all of these cases. It is a common structural weakness of the common law that it tends to

be unconceptual. Its principles emerge from the process of refinement through the development of the law in many cases, sometimes over centuries. Perhaps computers will be designed which can assist in and expedite the development of legal principles. A 1986 article in the Modern Law Review[48] examines the implications of artificial intelligence for legal and judicial activities. Who knows, perhaps lawyers in some future age will have a mini computer attached to the brain or carried (possibly inside the wig). I can certainly think of a few counsel (and even a few judges) who could do with such a supplement. At times, I would not even mind one myself.[49]

As Chief Justice Mason acknowledged at the opening of this Conference the Supreme Court of Canada has led the way with long distance video hearings, with the aid of satellites.[50] I foresee the time when evidence will be collected much more efficiently than we do it now. Out of recognition of the unreliability of human memory, much material will be collected on contemporaneous video interviews. Hearings will increasingly take place with the aid of telecommunications. Juries will sit through video evidence of witnesses, already vetted for inadmissible or otherwise irrelevant testimony. Judges will dictate their judgments into equipment which will provide transcription direct from voice to print, with the need for minimal editing. Substantive causes of action will be framed in legislation to lend themselves to automatic processing. The scope for discretion and judgment may be diminished, in order to promote the more efficient and uniform resolution of cases. In a sense, the New Zealand

Accident Compensation Scheme previews these developments. Instead of indeterminate general damages, the computation of which require human judgment, and instead of positing compensation on proof of negligence or other liability, the statute provides benefits akin to social security payments according to a statutory formula. The compensation for some may be diminished. But as a matter of community equity this result is justified by the assurance of compensation to all. It is achieved by major reductions in servicing costs, including the virtual total abolition of accident litigation involving lawyers.[51]

Few areas of legal practice will be unaffected by these developments. Land title conveyancing, which is the staple of the legal profession of Australia, will be replaced over time by administrative measures and computerised systems for passing property and realty. Already, in Australia, some orders for the dissolution of marriage can be secured "by post".[52] If the core work of large sections of the legal profession - accident compensation, land title conveyancing and divorce - disappear or are substantially reduced, will there be work for lawyers of the future?

Lawyers must move to embrace the change. For lawyers to ignore the greatest engine of change today which is science and technology is to condemn our profession both in its substance and methodologies to increasing irrelevancy. For the future of the law put Dicey down for a while. Drag yourself away from Halsbury. And begin your understanding of quantum physics. For in the twenty first Century, we will all be the children of Erwin Schrodinger.

FOOTNOTES

* Revised and updated version of a paper first delivered to the Canadian Bar Association's 1986 Annual Convention in Edmonton, Canada sub nom "Technology, the Law and Legal Institutions".

** President, Court of Appeal, Supreme Court, Sydney (1984-); Chairman, Australian Law Reform Commission (1975-84); Judge, Federal Court of Australia (1983-84); Member of Executive, Commonwealth Scientific Industrial Research Organisation, Australia (1983-6); Chairman, OECD Expert Group on Transborder Data Flows (1978-80); Commissioner, International Commission of Jurists (1984-).

1. Australia, The Law Reform Commission, Criminal Investigation, ALRC 2, 1975, 54.
2. ibid, 128f.
3. ibid, 94f.
4. Australia, The Law Reform Commission, Alcohol, Drugs and Driving, ALRC 4, 1976.
5. Australia, The Law Reform Commission, Insolvency: The Regular Payment of Debts, ALRC 6, 1977.
6. Australia, The Law Reform Commission, Human Tissue Transplants, ALRC 7, 1977.
7. Australia, The Law Reform Commission, Privacy and the Census, ALRC 12, 1979.
8. Australia, The Law Reform Commission, Privacy, ALRC 22, 1984.
9. Australia, The Law Reform Commission, Unfair Publication: Defamation and Privacy, ALRC 11, 1979.

10. See R v Brislan; Ex parte Williams (1935) 54 CLR 262 (radio broadcasting); Jones v The Commonwealth & Anor (No 2) (1965) 112 CLR 206 (television).

11. Australia, The Law Reform Commission, Contempt, ALRC 35, 1987.

12. This is discussed in Attorney-General (NSW) v John Fairfax & Sons Limited & Anor (1986) 6 NSWLR 695.

13. See discussion [1983] Reform, 12, Jan. 1983, No. 29.

14. The Law Council of Australia had included in its biennial conferences sessions on nuclear disarmament. Australian Lawyers for Nuclear Disarmament has an increasing membership. Leading members of the judiciary are writing and talking on the topic. See eg R. E. McGarvie, J "Speaking Out for control of a Global Epidemic" May (1985) Law Inst. Vic. J p.459.

15. See eg Atomic Energy Authority (Special Constables) Act 1976 (UK).

16. (1965) 18 DLR (4th) 481.

17. Ibid, 518-9.

18. Victoria Park Racing and Recreation Grounds Co Limited v Taylor & Ors (1937) 58 CLR 479, 496. See also Canada, Task Force on Privacy and Computers, Report Government Printer, Ontario, 1972.

19. Freedom of Information Act, 1982 (Aust); Access to Information Act, 1983 (Canada); Privacy Act 1983 (Canada); Freedom of Information Act 5 USC 552 (US); Official Information Act 1982 (NZ).

20. Organisation for Economic Cooperation and Development, Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, OECD, Paris, 1981.

21. But see Local Government (Access to Information) Act 1985 (UK) noted (1986) 7 Media Law 19. Cf N Marsh (ed) Public Access to Government-Held Information, Stevens, London, 1987.

22. See note 19 above.

23. Canada, House of Commons, Standing Committee on Justice and Solicitor-General, First Report on the Review of the Access to Information and Privacy Acts, 1986. See also Marsh, above n 22, 122 ff.

24. See eg Attorney General (UK) v Heinemann Publishers Australia Pty Ltd & Anor (1987) 75 ALR 353 (NSWCA); ibid (1988) 75 ALR 461 (HCA) Attorney General v Guardian Newspapers Ltd [1987] 1 WLR 1248.

25. Organisation for Economic Cooperation and Development, "Computer-Related Criminality: Analysis of Legal Policy in the OECD Area", OECD, Paris, 1985.

26. (1983) 42 O.R. (2d) 225.

27. ibid, pp 236-237.

28. id, 235. See also D.K. Piragoff, "Combatting Computer Crime with Criminal Laws", mimeo, paper prepared for Symposium on Criminal Law in the Information Society sponsored by the Netherlands, Department of Justice, April 1986. This subject matter is discussed in P. Robinson, "Legal Issues Raised by Transborder Data Flow" mimeo, paper presented at a conference on Canada - United States Economic Ties, Cleveland, Ohio, April, 1986.

30. Testimony of W.L. Fishman, United States Banking Committee, Sub-Comittee on International Finance and Monetary Policy, 9 November, 1981, mimeo 10-11.

31. See for example "Waging a Trade War over Data", New York Times, 13 March, 1983.

32. United States v Bank of Nova Scotia 691 F 2d 1384 (11 Circ) (1982); J. Fried, "Conflicting Assertions of National Jurisdiction Over Information Matters", mimeo, paper presented to the Media and Communications Law Section, Canadian Bar Association, October 1984, 3, cited Robinson, 13; J.T. Burnett, International Banking Law and Extraterritorality, 9 Transnational Data & Communications Report 17 (1986).

33. Robinson, 15 ff.

34. See eg Computer Edge Pty Limited v Apple Computer Inc (1986) 60 ALJR 313 (HCA). Cf Canada, Parliamentary Sub-Committee on Revision of Copyright, "A Charter of Rights for Creators", October, 1985, 46. Cf Canadian Government Response to Recommendations of the Parliamentary Sub-Committee on Revision of Copyright, February, 1986, 9. See also Canada, Supply and Services, "From Gutenberg to Telidon-Proposals for the Revision of The Canadian Copyright Act, Ottawa, 1984.

35. See eg Australia, The Law Reform Commission, Evidence, ALRC 38.

36. In Re B (a Minor) (Wardship: Medical Treatment) [1981] 1 WLR 1421 (CA).

37. Re Superintendent of Family and Child Service and Dawson et al (1983) 145 DLR (3d) 610 (SCBC).

38. Discussed G.J. Samuels, "Should we Strive Officiously to Keep Alive?" 1984, Proceedings of The Medico-Legal Society of NSW 213, 220. See also discussion G.P. Smith and J.B. Hickie, "Life or Death - Who Decides?", ibid, 190, 197.

39. On 5 July, 1986 Vincent, J in the Supreme Court of Victoria granted an injunction directed at a Melbourne hospital on the request of a grandfather, designed to preserve the life of a neonate born with severe spina bifida.

40. See discussion G. Williams, "The Right to Die" (1984) 134 New LJ 73. See also Z. Lipman, "The Criminal Liability of Medical Practitioners for Withholding Treatment from Severely Defective NewBorn Infants" (1986) 60 ALJ 286.

41. Corbett v Corbett [1971] P 83. For discussion see D. Pannick, "Homosexuals, Transsexuals and the Sex Discrimination Act" [1983] Public Law 279.

42. In Re C & D (1979) FLC 90-636; noted (1979) 53 ALJ 659.

43. R. Wilson, "Life and Death: The Impact of Human Rights on Experimenting with Life" (1985) 17 Aust J Forensic Sciences, 61, 80. Note the recent case in the European Court of Human Rights concerning a transexuals right to marry: Van Oosterwijck v Belgium (1981) 3 EHRR 557.

44. New South Wales, Law Reform Commission, Artificial Conception: Human Artificial Insemination, LRC 49, 1986. See also G.P. Smith, "Australia's Frozen 'Orphan'

Embryos: A Medical, Legal and Ethical Dilemma", 24 Journal of Family Law 27, (1985-6). See also I.R. Hill, Liability and In Vitro Fertilisation" (1985) 25 Med Sci Law 270.

45. In Re A Baby, Times Law Report, 15 January, 1985, p 8, Decision of Latey, J. Legislation is beginning to flow. See Infertility (Medical Procedures) Act 1984 (Vic); Human Embryo Experimentation Bill, 1985 (Aust); Surrogacy Arrangements Bill 1985 (UK).

46. New South Wales, Supreme Court Rules, Part 1 Rule 9A.

47. D. Waller, Technology and the Bar, (1986) 83 Guardian Gazette (GB) 988.

48. R.E. Susskind, "Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning", (1986) 49 Mod L Rev, 168.

49. G. Shutkin, "Video Tape Trials: Legal and Practical Implications" 9 Columbia J Law & Soc Probs 364 (1973). See also New South Wales, Supreme Court Rules, Part 14A, Rule 12.

50. W.Z. Estey, "The Changing World of the Judiciary", unpublished paper for the 23rd Australian Legal Convention, August, 1985.

51. G.W.R. Palmer, Accident Compensation: A Study of Law and Social Change in New Zealand and Australia, 1979, Oxford Uni Press, Wellington.

52. Family Law Act 1975 (Aust), s 98A.