

CANADIAN INSTITUTE FOR THE ADMINISTRATION OF JUSTICE

TECHNOLOGY, LAW AND THE COURTS

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Australia

SOME THINGS ARE UNCHANGED

Lawyers - and particularly judges - are haunted by the dream of justice. Apparent unfairness or an offence to conscience, set them struggling restlessly to right wrongs and thereby to contribute to a better society. This abiding dream is as true for today's generation of lawyers as it was for its forebears in the eight hundred year tradition to which we are successors. Our aspirations remain relatively unchanged. Carved onto the Old Bailey in London is the Biblical injunction: "Defend the widows and the children of the poor". Some things do not change. The need to punish and deter violence. The need to rectify bureaucratic arrogance and the insolence of office. The need to provide for the orderly passing of property, including at the inevitable end of life's cycle. The need to give clear rules to merchants and traders. The need to enforce the gathering of taxes. The law's delay.

If a lawyer of the 19th Century entered our courts today, whether in Canada, Australia or England, that lawyer would feel relatively at home in the basic procedures and with the rules of evidence. True, in some places, court dress has changed. True also, what would then have been thought heresy concerning the organisation of the profession would now be in place or under serious contemplation. But the fundamental forensic technique remains the same, as we are daily reminded in our courtrooms. The problems which are recounted in the

pages of the law reports, and the techniques used by lawyers and judges to solve them, stand fundamentally unchanged. In the century past we have seen two mighty wars. The great British Empire upon which the sun would never set has vanished, as a dream - just as the Empires of Ramses II and Caesar earlier did. Yet the English language and the common law of England have taken firm root in the four corners of the world. Why does the common law flourish today? Because it is adaptable, creative, ever changing. In this sense, it is like the most primitive form of life that leapt into activity with the first rays of the sun on the beaches of this planet. It affixes itself to the local society and culture. Yet it provides guidance from those who have gone before and basic principles which reflect enduring values of fairness and equity. So some things remain the same.

#### BUT SOME THINGS ARE DIFFERENT

But some things are different. And the most visible difference today derives from the impact of sciences and technology upon our societies and our profession. Some commentators say that all of the great scientific achievements of this century can ultimately be traced back to quantum physics and the restless mind of Erwin Schrödinger, working away in Germany in the 1920s. It would be surprising if there were not a fundamental unity to the great scientific developments that have occurred at the one moment of history. From the lay perspective, we see a myriad of developments which bombard our communities and necessarily impact our profession. The most fearsome is nuclear fission. It will be represented in this conference, indirectly, by Judge Paul Cotter of the United States Nuclear Regulatory Commission.

Perhaps the most pervasive technology today is informatics. By remarkable procedures of miniaturisation, laser and satellite technology, computers chatter away across the room and across continents. The integration of computers and communication technology is now well established. Informatics reduces the distances of the world. It challenges the very notion of jurisdiction which is so fundamental to the legal discipline. Because of the advance of the information revolution, and its direct relevance to the legal profession, much of our programme will be taken up in the impact of informatics upon our substantive laws and our lawyerly techniques. A panel will examine the inter-action between information technology and the law of evidence. That law, the child of the jury system, traditionally resisted secondary evidence. It insisted that the jury (and the court) have the best, primary evidence for the making of solemn decisions. But when the world moves on and the great decisions of society are made increasingly on the basis of automated data, the courts cannot hold back. Yet the preservation of assurance of the integrity of the

data, its security, its respect for the basic rules of confidentiality, privacy and other values must be safeguarded as the law adapts to this pervasive technological change.

Amongst the Commonwealth countries, Canada has led the way in the use of satellite and communications technology to permit arguments of cases in the Supreme Court, across the continent. In Australia, a similar procedure has now been adopted. Telephone conferences are now being commonly used by courts and tribunals in both countries.<sup>1</sup> This conference will hear about the use of video in pre-trial hearings in this Province. We will be invited to look into the future, at the paperless courthouse where the leather bound books will be a thing of the past - replaced by ephemeral electronic messages. Where the judge and the lawyer browse through their computer systems. Perhaps artificial intelligence will come, more rapidly than is now realized, to replace routine decisions presently made by human minds.<sup>2</sup> The rapid advances being made in artificial intelligence should cause us to pause before we dismiss this possibility with a scoff.

The latest part of the Victorian Law Institute Journal to reach my desk before I left Australia showed the changes which are coming upon the law and lawyers and which we will also be discussing at this conference. A paper on the use of copyright works in electronic data bases. Another on international licensing of new technology. A paper on recent patent law developments affecting biotechnology. An analysis of the Semiconductor Chip Protection Act 1984 (US) and of the new Australian Circuit Layouts Bill 1988. An examination of space law with its network of inter-related treaties. The law on unauthorised importation of high tech products. Criminal sanctions and th high technology trade. Legislative responses to computer crime. An appeal to lawyers for a new mentality for the resolution of high tech disputes.<sup>3</sup> And my own modest essay on the legal and ethical issues of artificial intelligence.

Just to show how far we have come, I pick up the volume of the Australian Law Journal fifty years earlier, in the year of my birth. The topics there reflected the society of the time. The moratorium legislation, which was the outgrowth of the Great Depression filled the pages at the beginning of the year. The war and national security regulations filled them at the end. In between were the articles on still familiar topics: professional ethics, the drafting of wills, the form of building contracts, an essay on the lawfulness of trusts for the encouragement of atheism, liens on crops and wool and - you will find this hard to fathom - a reflection on the difficulty of securing co-operation in the legal profession within a Federation. Not a word about technology. No reference to science. The Second War which was soon to unleash itself upon the world was to change all that. The terminus of that war at Hiroshima signalled the dawn of a new

Age. We are the children of that Age. Our burden is that we are also the successors to steadfast forebears of centuries earlier. It is our privilege to have to reconcile our intellectual inheritance with the great dynamic of our time: science and technology.

Most of this conference will be dealing with the implications for the law and lawyering of informatics. I first became aware of some of these themes a decade ago when I chaired a committee of the OECD, in Paris, on some of the legal implications of transborder data flows. The implications are many. They include some which will be examined here in Vancouver. The development of laws for the protection of privacy of data which crosses many borders and is therefore subject to many laws. The reorganisation of the criminal law to deal with a transborder data trespass. The modification of intellectual property law so that the message and not merely the medium, is provided with legitimate protection for a time. The revision of customs regulations and trade law which attaches to paper for the age of electronic messages. The adaptation of the law of contract to intercontinental dealings which are virtually instantaneous. The reconciliation of the freedom of information law of one jurisdiction with the national security laws of another. These and many other issues have been highlighted elsewhere.<sup>4</sup> I will not pause to review them now.

Nor do I intend to speak about informatics, except in the way in which it illustrates my theme. Nor will I address the courthouse of the future and the adaptation of our craft which is the substantial topic of many of the papers to this conference.

Instead, I wish to consider some of the issues that are posed by the legal consequences of biotechnology. These will be discussed by a panel over which Justice David Marshall will preside. In a sense, they are a species of the same genus as informatics. But they also present problems of the greatest sensitivity, controversy and urgency. Accordingly, they require our societies to face challenges which are even more acute than those of informatics. They test our institutions even more relentlessly than do the issues of informatics.

In the common law system, there is never, ultimately, a vacuum. Judges, by analogous reasoning, will provide solutions to new problems by drawing on the solutions offered for other, earlier problems, thought to be similar. Our courts will adapt to provide their solutions. Our courtrooms and their practitioners will absorb the new technologies. Even the very task in which we are engaged will be modified by artificial intelligence so that the technologies will change what it is that judges and lawyers do. To this extent, the judiciary and the legal profession will cope.

But a more fundamental question of concern to lawyers is

whether we will adapt quickly enough and skilfully enough? And even more fundamental is the question which is of interest to everyone concerned in the maintenance of an orderly society and the rule of law. It is whether democratic institutions can cope with the pace, variety, complexity and sensitivity of the changes which are now bombarding us. That is the fundamental issue which I raise at the beginning of this conference. In a sense, it is the issue that runs, like a thread of Ariadne through the multitude of subtopics which we will address. It concerns as much nuclear physics as it does informatics and biotechnology. It is whether, in the age of mature science and technology, the organs of democratic government, particularly the courts and the legislature, can cope with so much change.

Issues relevant to the law and technology lend themselves to anecdote sentiment and even passion. We cannot avoid these entirely. Nor should we try. The common law itself - the great legal system nurtured over the centuries moves from precedent to precedent. From the solution of human problems in individual cases it stumbles sometimes upon principles. It rises, on occasion, reluctantly to concepts as if by accident and then only over a long time. But cases are the stuff of the law. They add flesh to the bare bones of theory. For example - it was the eerie spectacle of Karen Quinlan, clinging to a form of life, that captured the attention of millions and caused them to reflect upon her predicament and its significance for their own faltering existence. The risks and dangers of in vitro fertilisation and surrogate parenting seem manageable when we depersonalise them and look upon them as issues for legal or ethical debate. But when, from anecdotal material, we affix to them the faces of a childless couple burdened with a dream of children - the fulfilment of their concept of a full life - the debates may take on another, more human complexion. The perils to privacy of computerized personal information systems tend to be forgotten in the great utility of such systems until we, or someone we know, suffer an injustice from an error, the more insidious because it may be hidden.

#### LAW IN THE REAR - AND LIMPING

An Australian soldier, turned judge (Justice Windeyer), once said of the relationship between the two of the disciplines represented here that the law marches with medicine, "but in the rear and limping a little".<sup>5</sup> In a sense, that relationship is inevitable and applies to law and technology generally. New technology presents entirely new problems. Are the hospital staff who terminate the respirator responsible for the death of the patient already "brain dead"<sup>6</sup> With the advance of sophisticated surgery which would without hesitation be used for a normal neonate, should a court require the self-same surgery for a deformed or

retarded neonate? Or is its life so "demonstrably awful" that it should be allowed peacefully and naturally to cease? Is a surrogate birth arrangement pernicious and void so that the courts will not enforce it?<sup>8</sup> And if a child is born to such an arrangement, will a court enforce it against the mother who has carried the child to full term?<sup>9</sup> Where an operation is complicated, will the law require a detailed exposition of the risks to an extent that was unnecessary in the earlier, obvious days of pre-anaesthetic brutal surgery?<sup>10</sup> How will the courts approach decisions at the end of life?

With new technology, novel advances in biology and entirely new problems (such as AIDS), it is little wonder that the law limps behind. Parliaments, with their busy agendas, can more readily find time for the political controversies from which votes may be extracted. This is the age of the ultimate triumph of the dismal science of economics. Whereas a Canadian Cabinet of the past might solve the world's problems by reference to the histories of Thucydides, today the focus of attention is more likely to be upon Milton Friedmann, GDP, the balance of payments and the latest terms of trade.

Out of a consideration of technological questions, there are few votes to be had. Indeed, in an age of increasing attention to single issue electoral campaigns, that territory often marks out danger. There may actually be votes to be lost in striking a positive position.

For example, the issues of medical rationing of new technological medicine should, in all conscience, come out into the open. We should know the bases upon which the decisions are made on a community and individual footing to provide or withhold treatment, so that we can be sure that it is not mere age, tender or some other arbitrary criterion that has determined a person's life or death. Yet, brought out into the open, these are controversial subjects. To a person whose life is at stake - or their family - the cruelty of denying the most up to date and available resources that medical science can offer will seem intolerable. The wise arguments about the expenditure of the medical dollar on a macro level melt before the flame of the anger of individual citizens or groups who insist upon this or that new therapy or facility for them or for their community.

At the end of life, Parliament might prefer to leave things alone so that decisions are made quietly - in hospitals; not noisily in courtrooms. And as for the status of the foetus, from that topic most politicians will run a mile. The powerful, polarised opinions of the community concerning abortion and the procedures of reproductive technology frighten many of our otherwise valiant leaders. In a democracy, this is understandable. Their object is to be re-elected. True, it is also often to serve and to strive for certain ideals. But if one is not re-elected, the



opposing camp may secure the spoils of office or - horrors - the legislature may be deprived of the inestimable benefit of one's own presence there. In these circumstances survival is the first rule of politics. Little wonder then, that the first reaction of politicians to the subjects we will be discussing is one of the most extreme caution. Nimble they tiptoe through the minefield of the topics upon some of which we will venture with foolhardy determination. For the strong feelings which may be engendered amongst minorities about any one of the topics of our conference could tip the balance. And, in the process, could tip them right out of office.

This is one of the reasons why the problems of technology and the law present a unique challenge to the democratic form of government at the close of the 20th century. When so many other portents are full of promise for democracy, a fundamental question is presented by the subject matter of this conference. Are the institutions of democratic society adapted to cope with the dilemmas which technology brings.

#### WHEN DOING NOTHING IS TO MAKE A CHOICE

The surest indication of a breakdown in the democratic process on a related issue is found in the treatment of AIDS in its epicentre, in the United States of America. For four and a half years of his long Presidency, the avuncular leader of that great democracy, Mr Ronald Reagan, could not bring himself on a single public occasion to utter the acronym "AIDS".

Other democracies have done better, including in the painful decisions to try to contain the AIDS epidemic by very candid public discussion of things so recently regarded, in modesty, as sacrosanct and private. And by the provision of needle exchange to halt the coming second wave of AIDS, spread through the vectors of the intravenous drug users who mirror the sexual orientation of the whole community. But even in such democracies, like my own, there are stumbling blocks. The provision of condoms and the supply of cleaning material for sterile needles in prisons are two of these.

From instances such as this the question recurs, whether our democratic leaders and institutions - and indeed our people - will have the strength and wisdom to make the right decisions where law and technology intersect. To fail to make decisions is often, in effect, to make a positive decision. Doing nothing may be easy. But doing nothing and allowing events to drift is sometimes to lose control of those events. Upon some subjects, that may be the correct decision. Upon others, such as AIDS, it may be fearsomely risky.

If the politicians do nothing, the solutions to legal



problems must be made by judges, adapting the common law. But the process of deciding what is, and what is not, permissible, in a courtroom, has obvious limitations. Usually, the decision must be made quickly, in the midst of more conventional activities. For example, the desperate urgency of decisions concerning the withdrawal of life support or the authorisation of an operation on an intellectually handicapped neonate necessarily restricts the time of judicial reflection and philosophising. The judge and the lawyers may have little insight into the ethical questions raised. They may have still less knowledge of the intricacies of the technology. Unlike law reform bodies and committees of inquiry, the courts cannot consult widely for expressions of public opinion as they develop the law. The rules of evidence may positively forbid the receipt of opinion polls. In a time of shifting moral values, deriving the rule for today from the precedent of yesterday may be perilous indeed.

Yet, haunted by the concern that inactivity carries in its train its own decisions, governments and legislatures are now beginning to act. The resolution of the problem of human tissue transplantation blazed the trail.<sup>21</sup> And then came the transplantation of the tissue of life itself - with in vitro fertilisation opening up new hope to infertile couples. Had this simply remained a hurdle-jump over the impediment of infertility in married couples, it is likely that the call for controlling legislation would have been muted. But soon other possibilities - and other problems - sprang up. The very procedure itself invited new experiments. The difficulties of achieving success produced the demand for multiple embryos to increase the prospects of achieving pregnancy by multiple attempts. Even today only 6.9% of IVF treatment cycles in Australia actually produce a live-born baby. And the question is presented: what is to happen to the frozen embryos no longer needed? Are they not human lives in potential?

The higher levels of deformity and defects discovered in the IVF embryos quite naturally turned the minds of the scientists to consideration of how they could reduce that factor of risk by genetic screening. Yet the idea of scientists experimenting on embryos after syngamy (when the sperm and egg fuse) greatly distressed some observers. They were concerned about where this might lead - to gender pre-selection or other forms of experimentation on embryos which signalled an erosion of respect for each precious, unique human life.

Because of early advances on the medical side of IVF in Australia - and early success in the regulation of human tissue transplantation - the call was soon made in my country for legislation to cover the issues raised by artificial conception. The arguments for such regulation were eloquently voiced by Professor Louis Waller, who was

appointed Chairman of the Victorian State Committee on Infertility. Legislation, he declared, would ensure "that Parliament, and hence the community, knows of and has the opportunity to consider and comment upon, developments in the challenging field of novel birth technologies". Where the scientists pleaded for flexibility and to be left to guidelines developed by their peers, Professor Waller declared that the creation of human life in the laboratory "should not be left to the ethical determinations of scientists or medical practitioners, nor to private conscience, nor to the chances of a forensic lottery in the superior courts".<sup>12</sup>

The result was the passage of the Infertility (Medical Procedures) Act 1984. This was one of the first attempts in the world to regulate, by law, the procedures of artificial conception. It sanctioned IVF, the freezing of embryos, the use of donor sperm, ova and embryos. But it prohibited cloning, animal - human hybridisation, surrogate motherhood and experiments on embryos. The last-mentioned prohibition, however, could be waived on the recommendation of an Advisory Committee. At first human embryo research was limited to the 22 hour old pre-syngamous embryo. Later, however, the State's law officers advised that, under the wording of the Act, experiments could be performed on embryos older than 22 hours if they were "spare". The scientists argued that to tackle the still low success rates and the high levels of defective embryos, experimentation on such "spare" embryos was essential. To many it seemed logical. Was this not simply science working for the benefit of human kind on profligate nature's excessive production of life? If such experiments were not allowed in Victoria, they would surely soon be taking place elsewhere. The possibility of technological leadership, financial rewards, not to say help to the patients, would be lost or delayed.

The Advisory Committee decided to approve genetic experiments on human embryos up to 2 days old. The purpose was to test the safety and accuracy of a new technique designed to help identify healthy embryos from those with growth chromosomal defects. But a by-election was looming. The health portfolio changed. The new Health Minister became concerned. The earlier decision to permit the research - which would admittedly have involved the destruction of the embryos - was suddenly reversed. The government imposed a moratorium. Two members of the Advisory Committee resigned. The State Premier declared: "I want to make it very clear that there will not be brave new world stuff in this State so far as I am concerned ... We will not allow genetic engineering, cloning and that kind of thing".<sup>13</sup> Then, as if to distance himself from the outspoken opinions of the Roman Catholic Archbishop of Melbourne (Sir Frank Little) the Premier said that experiments beyond 22 hours designed to test a particular embryo for implantation in a particular woman might be permitted. That was similar to

amniocentesis. But experiments on "spare" embryos for basic research of widespread significance would not be condoned.

Needless to say, this outcome pleased nobody. The scientists condemned it as ineffective and some the leaders packed their microscopes and left Australia. The members of the cautious Advisory Committee wondered about the utility of giving their reasoned advice. The fundamentalists expressed alarm at any further slippage beyond 22 hour syngamy. The humanists are still wondering what all the fuss was about. The childless couples saw yet another obstacle on the path to their dream. The community turned to the sporting pages to escape these puzzling dilemmas. And the good electors of the constituency of Greensborough dutifully returned the government's candidate.

This is a little story from a far-away corner of the world which illustrates just how difficult it is for the democratic process to grapple successfully with the issues presented by advanced technology. Many other instances could be cited dealing not only with biological developments but also with problems presented by informatics too. No doubt you could all tell your own stories.

#### THE CHALLENGE BEFORE US

These, then, are some of the common themes of this conference. The problems presented by the interactions of law and technology are pressing. They are numerous. They are more complicated than ever. There are no easy solutions for them. They require sensitive treatment. No jurisdiction can effectively tackle them alone. Yet to wait for all jurisdictions to act is a pipe dream. The World Health Organization, as in AIDS, can stimulate, provoke and guide our communities in the four corners of the world in the responses which we offer to the social implications of the new biology. There is no equivalent body taking the lead in the multi-faceted problems presented by the computer. Because the societies themselves are so different - and have profoundly differing cultural perspectives and moral values - universal solutions will, in any case, be almost impossible to come by. Between the universal nature of the problems and the almost infinite variety of the societies that must offer the solutions - we have one of the fundamental dilemmas of the legal treatment of technological questions today.

The Victorian Premier's reference to Brave New World takes us back to 1931 when Aldus Huxley penned his remarkable prophesy. Looking back at the famous novel, in 1958, Huxley wrote:

"In 1931, when Brave New World was being written, I was convinced that there was still plenty of time ... Twenty-seven years later ...

I feel a good deal less optimistic ... The prophecies made in 1931 are coming true much sooner than I thought they would ... and why has the nightmare, which I had projected into the 7th century AF (after four) made so swift an advance in our direction? The answer to these questions must begin where the life of even the most highly civilized society has its beginnings - on the level of biology."<sup>14</sup>

One wonders what Huxley would say today, a further quarter century on. This much is plain. Time has been telescoped. Advances in this, as in other technologies, bombard us. Puny human minds - and even more puny human institutions - find it hard to cope.

Yet cope we must. The law of Coke, Mansfield, Holt, Dixon, Earl Warren and Laskin bind us together. The language of Shakespeare and Milton binds us together. The ideas of liberty and of government of laws, not of men bind us together. These thoughts reassure us that we will be able to cope even with the problems presented by advanced technology. Democratic institutions, neutral courts, the rule of law, vigilant science and creative technology will all go on in harmony, in the future as in the past. But will they? What will be the informed democracy if science has gone beyond human understanding? What will the courts do if the laws are silent and the past precedents irrelevant? What does the rule of law mean if the legislators - fearful of a chance by-election - react hastily or, even worse, look the other way?

In 1264 a Norman nobelman, Simon de Montfort led the Barons of England in a rebellion against King Henry III. It was the first assertion by the English since Magna Carta of the right to limit the power of the Crown. It was by no means the last. The challenge was ultimately delivered by De Montfort when he rode on horseback into Westminster Abbey. There he threw down his gauntlet, literally.

I too throw down a gauntlet. Today, the challenge to our institutions, inherited from those far off distant days is new. It is not a challenge to the Crown; nor even to its successor, the Executive Government. It is not to the legislature or to the elected leaders of our professions or of our communities. It is to ourselves.

Will we have the wisdom to provide the institutional answers to the myriad of questions that will be asked at this conference? Can democracy cope in the age of science and technology? That is the fundamental question which we must face. A rational contemplation of the variety, difficulty and sensitivity of the problems will make us profoundly pessimistic. Only the talents of human intellect, and a

reflection on the stable continuity of our system of law and government, provide reasons for optimism. Each one of us will draw our own conclusion when the end of the conference comes.

#### FOOTNOTES

- \* President of the Court of Appeal, Supreme Court of New South Wales, Australia; Commissioner of the International Commission of Jurists; Commissioner, WHO Global Commission on AIDS; Governor, International Council for Computer Communications. Personal views.
1. P Nejelski, "Judicial Work in the 1980s: Nuts and Bolts" 31 Catholic Uni L Rev 213, 222 (1982). See discussion M D Kirby, "The Future of the Judiciary" (1987) 3 Canterbury L Rev 184, 190.
  2. M D Kirby, "Legal and Ethical Issues in Artificial Intelligence" (1989) 63 Law Inst J (Vic) 513; R E Susskind, "Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning" (1986) 49 Mod L Rev 168.
  3. M Pickering, "High-Tech Dispute Resolution: The Need for a New Mentality" (1989) 63 Law Inst J (Vic) 510.
  4. M D Kirby, "Informatics, Transborder Data Flows and Law - The New Challengers [1986] NZLJ, 381
  5. Mount Isa Mines Pty Limited v Pusey (1970) 125 Commonwealth Law Reports, 383, 395 (HC)
  6. The Queen v Malcherek and Steel [1981] 1 WLR 690 (CA).
  7. In re B (A Minor) (Wardship: Medical Treatment) [1981] 1 WLR 1421 (CA).
  8. Re AVC, Commyn J, Family Law, vol 8 no 6 1978, 170-1.
  9. In re A Baby, Time Law Report, 15 January 1985, 8 (Latey J).
  10. Sidaway v Board of Governors of the Bethlem Royal Hospital and the Muadsley Hospital [1985] AC 871 (HL).