THE AUSTRALIAN COMPUTER EQUIPMENT SUPPLIERS' ASSOCIATION

ANNUAL CONFERENCE, LAKESIDE INTERNATIONAL HOTEL

CANBERRA, TUESDAY 24 NOVEMBER 1981

COMPUTER SUPPLIERS AND THE LAW

The Hon Mr. Justice M.D. Kirby
Chairman of the Australian Law Reform Commission

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LAWYERS, POETS AND SCIENTISTS

Like most lawyers, when I was at school I was more interested in poetic reflections upon nature, the physical universe and the natural order of things than upon the actual study of how things worked and why the world was, as it was. Dreamy contemplation of Wordsworth's poetry was more in my line. Whereas those who went on to become engineers, scientists, technologists and computeristers spent a good deal of their time examining nature and reflecting upon the physical world, I diverted my attention to the consideration of the natural order in abstracto:

> The world is too much with us; late and soon
> Getting and spending we lay waste our powers,
> Nothing is seen in nature that is ours.
> We have given our hearts away; a sordid boon!

I was not alone in this disdain for the world of science and technology. Most people who go on to become lawyers, judges, administrators and lawmakers are not scientists or technologists. Most are ignorant of the detail of the dazzling developments that have occurred in our time. It is trite to repeat that half of the scientists who have ever lived are alive at this moment. It is sad to reflect that half of them are devoted to the science and technology of war.

Because scientists and technologists, amongst whom I somewhat indiscriminately lump computerists generally, including computer suppliers, tend to be interested in and enthusiastic about this or that scientific invention, all too often they leave the rest of society behind. There is comparatively little communication between scientists and technologists and the rest of the community. Apart from the brave effort of the ABC Science Unit, under the redoubtable Dr. Robyn Williams, we see little evidence of an Australian endeavour to debate the implications of scientific change for the rest of us mere mortals, the non-scientists who make up the Australian community. In the Science Show during the last weekend, one commentator asked a few pertinent questions. In an age whose principal engine is that of science and technolog,y I address these questions to you:

. Where, in Australia, are the outstanding, articulate scientists and technologists who are interpreting the technological advances and their implications for society? Where, in short, is our Jacob Bronowski?

. Where, apart from the ABC Science Unit, are the skilled scientific journalists who, accurately and without sensation or trivialisation, present the important developments of technology to the Australian community and help us to interpret the implications for our time and for our species?

. Why is it that in our news media, there is relatively little about science and technology in language which ordinary lay people can understand? How is it that Time and Newsweek can every week present to millions of Americans (and their overseas surrogates) interesting examples of (principally) American science and technology, when the Bulletin, the National Times and even the prestigious newspapers find it hard to afford space for more than an occasional item and then so often under extravagant headlines such as 'Tube Babies in Hospital Refrigerator'?

. How long is it since you saw a serious documentary about science and technology on commercial television, even after the late late show?

I am move to ask these questions of you because of an experience I had on Friday last. At a symposium on the industrial applications in Australia of genetic engineering, I had the temerity to suggest that the community had a legitimate interest in the risks that might be run by the large-scale industrial application of genetic manipulation techniques. These techniques began in earnest only as recently as 1973 when scientists found ways of cutting the chromosomes of organisms, including man, into small fragments, some containing only

one or a few genes. The isolation of these genes can undoubtedly result in the production of substances which have already proved beneficial for mankind, such as human insulin or proteins from which vaccines can be prepared. The danger of the misuse of the new technology is already recognised by at least two Federal Acts of Parliament[1] and by the decision to establish a government monitoring committee that will lay down guidelines. Instead of acknowledging legitimate community fears, I was alarmed to find some of the scientists at this meeting appearing to challenge the legitimacy of community and lawyerly interest in their activities. A chauvenistical reaction was even espoused, namely that scientists do not seek to intrude the lawyer's mysteries, so lawyers should leave their activities alone. Banal cavilling at particular instances of community fear about genetic engineering was thought by some of these scientists to settle the debate about the kind of problem presented by the new technology of genetic manipulation. Whether it is doctors or lawyers, geneticists or computerists, we have reached a dangerous pass when the expert resists community interest and involvement in the activities of the expert which profoundly affect community interests.

I am happy to say that in the work of the Australian Law Reform Commission on matters relating to the computerisation of Australian society, we have found no evidence of intellectual arrogance, professional resistance2or community indifference. On the contrary, both at the level of the Australian Computer Society and the Australian Computer Equipment Suppliers' Association, and in dealings with individual computerists, we have had a great deal of anxious, supportive help. There is, of course, legitimate concern about the dull hand of bureaucracy in laws that are developed to deal with the social implications of computing. There is a perfectly understandable worry about the introduction of legal institutions, rules and procedures which will impede the efficiency which the new technology can bring. There is a healthy scepticism about the capacity of slow-moving laws and legal institutions to cope with the dynamic of change in information technology today. There is a quite proper, modest realism, in the realisation that we in Australia are 'small fry' in the world information technology league, and therefore unable readily to impose idiosyncratic legal rules upon a technology that is at once universal and virtually instantaneous. But for all these reactions, there has been a spirit of co-operation and a ready willingness to acknowledge that with the advent of the new information technology, we create new social problems that are legitimately addressed by the law. I applaud this positive spirit and I express appreciation for it. It promises success for the introduction of effective data protection and data security laws for Australia. Your Association, in commenting on the Law Reform Commission's discussion paper on Privacy and Personal Information[2] agreed with the recommendations that no general new tort should be created but went on in a positive vein to acknowledge:

Your recommendation of specific new rights based on unlawful intrusion and breach of established fair information practices appears to be a correct approach.[3]

GOOD COMPUTING CITIZENS

Whilst I am handing out these bouquets, can I be permitted a word of criticism? I realise that the computing industry is relatively new. It is diverse, international and competitive. The Australian Computer Equipment Suppliers' Association is undoubtedly a most useful development and the initiative of those who brought it into being deserves commendation. So many legal, fiscal and political developments are occurring, which require the attention of the industry as a whole, that it is remarkable to think that it was not until 1977 that the establishment of such an Association was conceived and brought about.

The annual report of the Association records the useful work that has already been done on many fronts. I pay tribute to the balanced and realistic submission that was received by the Law Reform Commission in its inquiry about privacy protection. But though the establishment of a Suppliers' Association was timely, and though valuable work has already been done, it is surprising to me that there is such a comparatively small investment in social policy research by the Australian computing industry, given the rapid penetration of Australian society by the new information technology and the many problems presented to society as a consequence. For a multi-million dollar industry, in the midst of probably the most dramatic and dynamic and profitable of today's technologies, I do not think it can be said that the computing industry is generous in devoting funds to social research concerning the implications for modern society of the new technology. I realise that some funds are devoted to this purpose. I also realise that not all the funds are expended in a way that will secure immediate public recognition. I look at this problem from the perspective of one who now knows a little of the national and international implications of information technology for the legal system. I recognise the competitive position of the Australian computing industry and the limited funds that may be available for what may be called the activities of good corporate citizenship. But if only a small fraction of the very great sums which are being expended and received with the rapid expansion of computing in Australia were devoted to the provision of research into social attitudes, legal, social and economic implications and the design of laws to cope, I am sure the result would be a significant contribution towards a legal system that might then come to something of the adaptability and dynamism of the information technology itself.

I realise that, in the real world, computer suppliers and others involved in the computing industry are not charitable institutions. They pay their taxes and they look to government to sort out most of the problems that occur. Milton Friedman would no doubt urge that public-spirited expenditure on research about the social implications of computers would be misguided, would distort market forces and would be suspect anyway because of the association with the industry.

The fact is that industry does invest significantly in scientific research, where the return is easier to see and where the participants are likely to be on the same intellectual wave length as the present computerists. I would like to see the Australian computer suppliers, and other organisations involved in computing, taking equal initiatives to promote disinterested research into the social and legal implications of their technology. The Australian Computer Equipment Suppliers' Association may be a good vehicle to provide funds for such research, under adequate guarantees of objectivity and in ways that would ensure that competitive advantage was not secured by one organisation over another. In this way the Association would be less reactive to the initiatives of others. Instead of responding, in an ad hoc fashion, to the initiative of the Industries Assistance Commission, of the Law Reform Commission, of the New South Wales Privacy Committee, parliamentary and private bodies, new legislation and so on, a positive contribution could be made that would assist society to digest the changes that are coming upon it so rapidly.

Let there be no doubt that there are many fields worthy of research. They have been identified at an international level, principally by the OECD, in many national reports[4] and locally. They include study of such matters as:

. Criminal Law. The implications of computerisation for the criminal law, criminal procedure, the capacity of juries to cope, the ability of police forces to detect, trace and prove computer fraud.

. Vulnerability. The implications of computers for the vulnerability of Australian society : its susceptibility to disaster, whether by terrorism, accident, mistaken erasure, loss of vital data and so on. What should we, as a society, be doing about this heightened vulnerability and what legal changes are needed in the wired society.

. Copyrights and Patents. The implications of computers for copyright and patent law has been called to attention in many places. A scientific discovery cannot be awarded a patent as an abstract idea. Protection is given to the 'invention' and the 'work' which, though related to information, are not identical with the information itself.

. <u>Reducing Legal Routine</u>. The implications of computerisation for many areas of substantive law need to be examined, including the implications for land conveyancing, said to constitute 50% of the work and fee income of the lawyers of Australia. The capacity to reduce many routine disputes and problems presently consuming high cost, slow court time, represent fields for fruitful research directed at the better administration of justice. It does not require a great deal of imagination to envisage the future use of computers to secure greater consistency in the sentencing of convicted offenders, the use of computers to at least reduce the field of dispute in cases involving unexceptional physical injuries and wage losses. Some writers have even suggested that computers will come to be used to develop legal principles themselves, in much the same way as they are used in modelling in research in other disciplines.

. <u>Administration of Justice</u>. One project that is before the Law Reform Commission at the moment on the law of evidence requires us to examine the implications of computerisation and other technical manipulation of information for the oral trial tradition inherited in Australia as in other parts of the English-speaking world. But the implications of computers for the more efficient discharge of court business has not really begun. A great field of research of potentially enormous social benefit lies there waiting for funds to become available.

Now, although Christmas approaches, I realise that computer suppliers are not in the Santa Claus business. In a very fast-moving and competitive market, they are seeking to secure the profits with which to continue the technological and industrial advances that have already occurred. The hope of vast sums flowing from the examination of the impact of computerisation upon society and its laws is a futile one, and I know it. But for all that, there must be a realisation that the extent to which computers can ultimately serve society depends as much upon the invention and marketing of dazzling new equipment as on the capacity and willingness of society to absorb that which is presented. If large numbers of persons become unemployed, if personal privacy is significantly diminished, if society is made unacceptably vulnerable, if national culture and security are undermined by loss of local independence, if computer crime is even partly unattended and if business and industry proceed to reap the benefits of computerisation whilst the administration of justice languishes with antique forms and procedures, the result can only be dislocation. This will ultimately be destructive of the capacity of the community to absorb more of the technological advances. I put it this way, with an inevitable element of hyperbole, so that the point can be underlined that, ultimately, the business you are in is one of serving a peaceful, contented, law-abiding and safe community. Social advance and acceptance must go hand in hand with technological change.

Computer equipment suppliers and others in the remarkable industry of information technology must be made to understand that it is in their self interest to help society to absorb and cope with social and legal implications of the technology they are so successfully introducing throughout the Australian community. When I looked to the Annual Report of the Australian Computer Equipment Suppliers' Association for 1979/80, I found it significant that no budget was attached. I suspect (possibly wrongly : judges are a suspicious lot) that this is because the modesty of the investment might attract criticism and even derision in some quarters for the amounts which such a prosperous, adventurous and fast-developing industry was willing to spend upon the social, economic and political concerns of an industry-wide dimension. I will say no more about the topic. I hope the future will see a greater fraction of the income of computer equipment suppliers devoted to helping the lawmaking process and the institutions of this country to cope with the dynamic changes that attend the rapid penetration of Australia by informatics.

TBDF AND THE OECD

Before I resume my seat, I want to say something briefly about two other matters that may be of interest. The first relates to OECD Guidelines on Trans Border Data Barriers and the Protection of Privacy. I was the Chairman of the OECD committee which developed these guidelines. They were developed in response to important new patterns which are emerging in data communications today. In 1980 it was reported to the OECD that approximately 13 million data communication transactions take place each day in Western Europe. Of these, approximately 10% are international. This ratio contrasts with voice traffic, where only 1% of transactions are international. Data communications have already overtaken telex in terms of total flow of traffic. The total number of data communications transactions in Western Europe was expected to increase at a compound annual rate of 25% in the period 1979-1987. The number of international data communications transactions was estimated to increase at an annual compound rate exceeding 30%. Similar developments can be expected in Australia. Indeed, we may go further because of the continental size of our country and our geographical isolation from traditional areas of cultural and economic concern.

Although international treaties will probably be needed in due course to help to achieve consistency between local laws operating on a largely international technology, the OECD Guidelines opted for a lower level of operational force. They were adopted by the Council of the OECD in September 1980. They have not yet been accepted by the Australian Government.

The guidelines are in the form of a resolution of the Council of the OECD. This resolution adopts recommendations commending the proposed Guidelines to member countries, urging them to take them into account 'in their domestic legislation', to 'endeavour to remove or avoid creating unjustifiable obstacles in trans border flows of personal data' and to 'co-operate in the implementation of the Guidelines'. Several countries abstained from the recommendations, including Australia. The United Kingdom abstention was withdrawn on 23 September 1981 when that country endorsed the Guidelines. The position has now been reached that of the 24 member countries of the OECD, only Australia, Canada and Turkey have not subscribed to the Guidelines. The Turkish abstention relates to the military government. The Canadian abstention relates, apparently, to sensitivity to United States dominance of data communication. The United States was recently described as the 'OPEC of information'. The Australian abstention was to permit consultation with the States. The Minister for Science and Technology, Mr. David Thomson, recently announced his hope that Australia would shortly be able to adhere to the Guidelines. Certainly, in the work of the Australian Law Reform Commission, we are attending most closely to the Guidelines in the development of our proposals on Federal privacy protection.

Lack of laws on data protection and data security can sometimes cause economic disadvantages, to countries which lack such laws. Concern about privacy protection is not solely a matter of civil liberties but can make economic good sense. Already cases have arisen where the export of personal data from a country with data protection laws has been forbidden to a country unable to offer equal protection against the haemorrhage of sensitive personal data. The classic example is that of the Siemens company in Sweden which wanted to transfer personnel files from its Swedish branch to its headquarters in Munich. Permission was refused. Another well known example where permission was refused involved the Health Department of a Swedish county authority which was prevented from ordering, from a British firm, 80,000 plastic cards which contained personal information in computer code about Swedish citizens. The risk that 'shadow' registers on Swedish people could be established in other countries, outside the reach of national law, was deemed too high. A new phenomenon appears on the scene in the development in Third World countries of limitations on trans border data links where data processing alternatives exist within the country or where external interests control access to the foreign data banks. There is a legitimate concern about the risks of data protectionism and about data fiscal policies. I will put the latter no higher than to say that, despite a traditional reluctance to tax information and information flows, anything growing at such an exponential-rate and measurable-rate as data communications must inevitably attract the ever-hungry eye of the inventive tax gatherer. This development

will have to be closely watched. In Norway, for example, a provider of a data processing service is already obliged to add 20% VAT to the bill of his customer. The result has been that many customers have switched to a foreign provider of computer services as no Norwegian tariff is calculated on import. Cases can exist in Europe, however, where VAT must be paid by both the provider and the user in their respective countries : a kind of double taxation. The moves to indirect tax in Australia on the basis that the 'user pays' should be closely watched in the light of the European experience.

COMPUTERS AND THE CONSTITUTION

Finally, let me say something about computers and the Australian Constitution. In the submission received by the Australian Law Reform Commission from the Australian Computer Equipment Suppliers' Association, it was urged that the functions of privacy protection should proceed at a Federal level and that our final recommendations to the Commonwealth Government 'should seek the abolition of State privacy bodies in favour of a Federal organisation'.[5]

The terms of reference to the Law Reform Commission limit it to the Federal public sector, the Territories (now effectively the Australian Capital Territory) and little more. It would therefore be beyond our terms of reference to recommend as suggested. However, I am conscious of the need for us, in Australia, to avoid the problems that arose on the European continent. It was the very diversity of laws on data protection and data security, springing up in the various jurisdictions of Europe, that led to the pressure in the Council of Europe and the OECD for the development of international rules that would harmonise the cocophony of domestic regulation. It will clearly be a misfortune for Australia if, with the spectre of European diversity before us, and for want of clear constitutional power or appropriate national resolve, we proceed down the track of devising differing privacy laws in different jurisdictions, affecting the new information technology. It is one thing to say (as our discussion papers say and the submission of the Association urges) that no differing approach should be taken to protecting personal information, whether computerised or not. The fact remains that, at least with computerised personal information, there is a chance that a single Federal Act could be devised which would 'cover the field' and secure for our continental country the one regime of data protection and data security. This could possibly be secured by a Federal Act based upon the Commonwealth Parliament's constitutional powers in respect of telecommunications, supported by powers in respect of corporations, interstate trade and

commerce, the Territories and so on. The need for careful attention to the development of a national approach to the provision of rules and institutions for information privacy protection seems imperative because of the national, indeed international, nature of the new information technology and the enormous complexities and diseconomies that would result if every jurisdiction of Australia went its own way in the development of information privacy standards and institutions. It is in realisation of this danger that we have heeded the call made by your Association and have worked as closely as we could with State colleagues willing to do so. In the ultimate, however, it may be necessary, at some time in the future, for the Commonwealth Parliament to grasp this constitutional nettle : the uniform natural regulation of computing and its social consequences.

CONCLUSIONS

What have I said in this brief talk? Five things, in essence.

. Scientists and technologists, who have such a profound effect on modern Australian society, and those who convert their thoughts to industrial and practical application, have a commensurate duty to communicate better with the society they serve, whether they be geneticists, nuclear physicists or informatics computerists.

. The impact of new information technology alone presents our society with many difficult problems, including problems for the law. Some of these are being studied by the Law Reform Commission. Many lie unattended, awaiting future treatment. Meanwhile, the problems arise with the speed of the technology. Our institutional means to supply the answers move at a somewhat more languid pace.

. The new information technology has international ramifications and will force the pace of the development of international law. This law will come about as much as a result of economic pressure as out of respect for Western democratic values.

. In Australia, we have a special problem, in that our Constitution was drafted before computers and indeed before science and technology presented so many problems which are not really apt to be dealt with State by State. The danger of the development of differing laws to impact the computing industry, and the need for Federal or national attention to uniformity of laws on this subject, must be an important mandate of the Australian Computer Equipment Suppliers' Association. The economies of informatics could be very effectively undone by diseconomies of the variety of laws.

. Finally, I do urge that more thought be given to the special social responsibilities of your dynamic, prosperous, inventive industry. If the social and legal problems, some of which I have mentioned, lie fallow and remain unattended, your successors may say that these were the years the locusts have eaten, during which your industry pressed ahead with technological achievements and short term gains, but spent insufficient time and inadequate resources upon helping society to adjust to the social, economic and legal implications of what you were about. I hope that you will not allow that to be your industry's epitaph.

FOOTNOTES

1. Crimes (Biological Weapons) Act 1976 (Cwlth). Health Act Amendment Act 1981, amending the Therapeutics Goods Act 1963. See also L.B. Cavalieri, 'The Double-Edged Helix', reviewed M. Perutz, 'Science Under Indictment', in Times Literary Supplement, 6 November 1981, 1287.

2. Australian Law Reform Commission, Discussion Paper 13, Privacy and Intrusions, 1980; Discussion Paper 14, Privacy and Personal Information, 1980.

3. The Australian Computer Equipment Suppliers' Association Limited, Submission to the Australian Law Reform Commission on Privacy, 2 December 1980, 1.

4. Notably the report by S. Nora and A. Minc, L'Informatisation de la Societe, Paris, 1978 (France) and Report of the Consultative Committee on the Implications of Telecommunications for Canadian Society (Clyne Report), Ottawa, 1979. See generally, Privacy Protection Study Commission, Personal Privacy in an Information Society, Washington 1977 (United States) and Report of the Committee on Data Protection (Lindop Report), Cmnd, 7341, London, 1978. See also report by a Swedish Government Committee (SARK), The Vulnerability of the Computerised Society : Considerations and Proposals, (Trans. J. Hogg), Stockholm, 1979.

5. The Australian Computer Equipment Suppliers' Association Limited, Submission, 2.