

CANADIAN INSTITUTE FOR THE ADMINISTRATION OF JUSTICE

Friday 22 August 1986, Edmonton, Alta. CANADA

"COMPUTERS MAY REPLACE JUDGES IN THE FUTURE"

SUMMARY OF SPEECH BY JUSTICE MICHAEL KIRBY

EMBARGO:            FRIDAY, 22 AUGUST, 1986 NOON

SUBJECT:            COMPUTERS MAY REPLACE JUDGES, SAYS KIRBY  
AUSTRALIAN JUDGE PREDICTS FUTURE AT CANADIAN  
CONFERENCE.

EDMONTON, CANADA, THURSDAY (EVG)

The President of the New South Wales Court of Appeal, Justice Michael Kirby today predicted that computers and artificial intelligence would take the place of much routine judicial work. He said that whilst human judgment would remain necessary for many task in the courts, the judiciary would not be immune from the impact of computer technology. This was one of several predictions made by Justice Kirby when delivering the key note address to the annual seminar of the Canadian Institute for the Administration of Justice. The seminar is attended by judges from all parts of Canada and from England and the United States. Justice Kirby is in Edmonton as a guest of the Canadian Bar Association.

Predictions for the Future

Amongst suggestions made by Justice Kirby for the changing role of the judiciary, he mentioned:

- \* the likely increase and change involved in interpretation of bills of rights, "despite an apparent temporary set back in Australia".
- \* the growing function of controlling the bureaucracy and developing administrative law.
- \* the increased difficulty of resolving disputes involving scientific evidence.

- \* the increased use of technology in the courts.
- \* the obligation to cope with a litigation "explosion".
- \* the need to develop "management strategies" without becoming just another part of the bureaucracy.
- \* increasing use of conciliation and arbitrators as an alternative to court resolution of disputes.

Justice Kirby also said that if North American experience was any guide, it was likely that increasing numbers of judges would leave the judiciary because of stress, diminishing financial rewards and disillusionment with repetitive work.

#### Need for Scientific Literacy

Justice Kirby said that judges of the future would need to be more literate about science and technology both to resolve disputes involving these issues and to maximise the efficient use of technological aids.

He said that the experience of lawyers and their education was generally such as to make a detailed understanding of the language of science and technology "uncongenial or even impossible". He referred to various suggestions for resolving disputes about scientific evidence including:

- \* use of scientific arbitrators.
- \* appointment of court experts.
- \* a system of scientific assessors or
- \* creation of a special "science" court.

#### Artificial Intelligence on the Bench

Justice Kirby said that leading legal journals were

beginning to canvass the possibility of computers and artificial intelligence taking over from judges. To some extent this would result from changes in the law which reduced the factors of evaluation. If compensation for injuries were replaced and the law moved from a "fault" system to one akin to social security, there was no reason why computers could not perform functions presently done by judges and juries.

But Justice Kirby mentioned a more radical development "further down the track". This involved the use of artificial intelligence in legal reasoning:

"We should not laugh at this possibility of utilising artificial intelligence to assist or replace judges, considering that we are so indispensable that no machine could ever replace us. Artificially intelligent computer behaviour is already performing highly specialised functions, such as the translation of languages, the recognition of images and objects of the physical world, the playing of complex games such as chess, the learning from examples and precedents and even the writing of further programs to generate more complex understanding, automatically. The prospect of the application of these developments of computer technology to legal problem solving is by no means fantastic. On the contrary, with rudimentary changes in the substantive law designed to reduce the variables and to reduce matter requiring evaluative judgment, the prospect of processing many legal issues by facilities of this kind becomes quite realistic. As is repeatedly pointed out, the introduction of computers in such highly important activities as

life-saving medical applications, national defence systems, public banking networks and space exploration make the prospect of using artificial or automated intelligence in the justice system not only feasible in the long term but probable in the short term."

Justice Kirby said that the use of computers and artificial intelligence might assist the courts to provide access to justice to people of limited means, reserving human decision making to matters of evaluation where judgment according to human experience was necessary.

#### Litigation Explosion

Justice Kirby said that in the United States trial courts there had been a 250% increase in the work load during the past twenty years. In the appeal courts there had been a 700% increase. He said that similar developments were likely to follow in Canada, Australia and other countries. He warned against the "bureaucratisation of the judiciary". He said that in some United States courts, such was the pressure of work that judgments were written by law clerks, simply to get through the work load. He said that he could not see this happening in countries whose judiciary followed the British tradition. However, he mentioned as possible responses to the increased work load of judges:

- \* the appointment of additional judges.
- \* new attention to administrative efficiency in the courts.
- \* the reduction of appeal benches from three judges to two.

- \* control of numbers of appeals by the necessity of leave to appeal.
- \* the reduction of oral argument and the substitution of written argument.
- \* the fixing of times for oral argument.
- \* the publication of draft judgments to focus critical legal advocacy.
- \* the increase in ex tempore (ie immediate oral) judgments instead of written judgments, which tend to take more time.

#### Changing Times

Justice Kirby said that despite the changing times, the judiciary would adapt. However, he warned that the changes now facing the judiciary are increasing in number and complexity.

"Reflection on our judicial tradition is usually a cause for self satisfaction, complacency and self congratulations. But to the question whether time is on the side of the judiciary, as presently organised, the answer is uncertain. The work is changing. The techniques expected of us are changing and adapting. The personnel who offer themselves to the monastery and their attitudes and those of their fellow citizens are changing too. In a time of rapid change, we can certainly derive institutional strength from the history and integrity of our forebears. ... But changes are increasing in number and complexity. The beginning of wisdom, ... is an understanding of the forces for change. Only if we understand those forces can we successfully adapt the precious institution that is in our charge to continued,

relevant service to our citizens: at once independent, honest and diligent; modern, creative and technologically literate.", Justice Kirby concluded.

NOTE ON SPEECH

The above speech will be delivered at the opening session of the Judicial Seminar on the Art of Judging organised by the Canadian Institute for the Administration of Justice at Edmonton, Alberta, Canada. The address is delivered at the Westin Hotel, Edmonton, Alberta. For point of contact telephone Mr. W.H. Hurlburt, (403) 432 5291. Justice Kirby is staying at the Westin Hotel, Edmonton.