

## TELOS Conference Summary by the Hon Justice Michael Kirby AC

### CMG

#### MEMORABLE IDEAS

A conference of such diverse composition produced many challenging ideas. Lawrence Lessig's opening speech was memorable both for its content and its presentation. PowerPoint can rarely have been deployed so skilfully in support of challenging concepts. Surprisingly for some, Professor Lessig revealed himself as favouring at least some old-fashioned laws to prevent the over-reach of inbuilt 'architecture' which incorporates undesirable regulation of information technology. He reassured us that "good law will crowd out bad Code".

Professor Stephen Minger explained the beneficial part played in the design of United Kingdom law on biotechnology *inter alios* by the then Bishop of Oxford. He doubted that the same result could be procured in the United States by the engagement of Dr Billy Graham in a comparable endeavour. Despite his description of knee-jerk political responses in Britain to the use of cow eggs for human embryonic experimentation, Professor Minger showed good grace by screening a humorous television segment complaining of the risks of his "mootants". But he took this point a little too far in mourning the loss of so many cow eggs, consumed by participants at the conference with their morning British sausages.

## 2.

Deryck Beyleveld, by reference to some recent British regulations on biotechnology, insisted that there was a limit to permissible legal fictions. No doubt this would come as something of a surprise to legislative drafters throughout the world who cherish such techniques.

Graeme Laurie described the new Ethics and Governance Council of the United Kingdom Biobank. He seemed to rejoice in the fact that it had been created with "no teeth". This called to mind Stephen Minger's optimistic view, a few moments earlier, that human embryonic stem cells will be used before long to implant new teeth in the place of extractions or natural defects. Perhaps a similar implantation will be needed in the case of the Council.

Professor Han Somsen explained the dangers inherent in the precautionary principle. He described various forms of Trojan horses with which the new technology was threatening democratic society. Mingyuan Wang from the People's Republic of China surprised and delighted the conference with his descriptions of the regulatory "games" played by officials and lawyers in China when faced with the problem of regulating technology. Those descriptions were refreshing in their candour. They also made those of the participants from Western countries feel quite at home in the reported disorder and neglect described in China.

### 3.

Dr Andrea Buechler gave a description of the rather more ordered way in which the Swiss Federation has ventured upon the preparation and adoption of legal regulations to address various problems of biotechnology. As is often the case in federal systems of government, the story was packed full of compromises - the resulting regulations containing something for virtually everyone involved in their design.

In his remarks, Professor Andrew Murray described the sometimes erratic ways in which law impinges on new information technology. He explained why consumers, faced with the question of whether their activities were illegal, would often answer with their own question: "Do I care?". At least for domestic and personal use, this, it seems, will often be the response to suggested breaches of intellectual property law by individuals. Indeed, Professor Murray proclaimed a new doctrine designed to enhance the role of individuals in respect of the regulation of information technology. Thus, he declared, that the "pathetic dot" of Lawrence Lessig's writings (suggesting the helpless lack of power of the individual in this respect) can, by technology itself, be joined with other individual dots to create communities of "active dots" that, together, can influence the design of regulation by sheer numbers and insistence.

Paul de Hert, drawing on work he has done with Serge Gutwirth and Laurent De Sutter, gave a presentation that was replete with aphorisms. He declared, for example, that "law is merely what lawyers do". By reference to the reassuring formality of normal legal dress,

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especially of judges, he asserted that "the tie is a legal instrument". He told us that "lawyers look at technology with undisguised disrespect". He urged us "when you think of lawyers, lower your expectations". In harmony with this somewhat pessimistic approach to the role of law in regulating technology, I came to the suspicion that lawyers, for the most part, could not care less about the subject of the TELOS conference. The challenge before the participants is to explain why the subject matters in order to awaken lawyers and others from their present slumber.

Professor Jonathan Zittrain presented an historical account that concluded that modern "tethered" appliances, with inbuilt 'Code', had begun to return information technology to the punched cards of Herman Hollerith. He suggested that, just as Hollerith and IBM Corporation had controlled the technology which they made available to their clients, so contemporary manufacturers would endeavour to exert a similar control, bringing to an end a comparatively short interval of individual user freedom.

Some of Professor Zittrain's descriptions of developments affecting information technology were sobering. The reported FBI demand that in-vehicle technology, designed for driver communication in an emergency, could be turned into a mechanism for official surveillance of the driver, suggested the urgent need for judicial or other independent scrutiny of such surveillance lest it becomes a means of widespread official intrusion into the lives and privacy of individuals. His story of the

Chuck Roast website in the United States, infected with a damaging virus, illustrated the vulnerability of Internet users to commercial destruction by those who select their sites as virus targets.

Professor Judy Illes explained advances in the technology of lie detection. Her description of brain scan technology was suitably cautionary, given the current state of the science. Properly, she reminded us that no brain scan has yet been devised that can measure moral culpability. The will to do justice, and to avoid injustice, is, so far at least, unique to the human decision-maker. Yet will this be capable of inclusion in future advances of artificial intelligence?

Richard Ashcroft described advances in biology of relevance to the technology of war. He explained how soldiers and other service personnel are being replaced in many countries by enhanced "war fighters". Special Forces, it seems, are not so special anymore. Ironically, the biologicalisation of war is most well advanced in Anglophone countries. I say that this is ironical because it has been the long tradition of England and English-speaking countries to maintain small professional armies of citizen soldiers who return to their homes when the need is not there. This tradition may be changing.

Dr Bert Gordijn presented an astonishing introduction to nanotechnology<sup>1</sup>. The advance of ever-increasing data, crammed into

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<sup>1</sup> cf G H Reynolds, "Nanotechnology and Regulatory Policy: Three Futures" 17 *Harvard Journal of Law and Technology* 179 (2003).

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ever-smaller physical objects, seems so far to have reached no final limits. The entire library of the United States Congress can, it appears, now be reduced to a tiny microchip. Scientists are experimenting to discover whether it will be possible to implant all this knowledge in a human brain, rendering it directly available to the recipient on demand. Reinforcing the observations of Richard Ashcroft, Dr Gordijn made the point that the cutting edge of much of nano-technology exists in military circles for military use, doubtless for the hoped for advantages for the modern "war fighter".

Possibly the most troubling image of the entire TELOS conference was a humanoid illustration of a kind of electronic human head, otherwise disengaged from human form, into which, it is postulated, the 'mind' of a living individual might in the future be uploaded so that that individual's intelligence, in software form, could potentially live forever. The crossover of biological material into electronic is a development that has already begun. At least potentially, this will produce the next great leap in human evolution so that derivatives of the human species may one day set out for the hostile environment of distant planets and far off galaxies to survive the eventual destruction of our own.

If all this sounds like science fiction, the lesson of the TELOS conference was that many advances of contemporary science and technology grew out of the imagination of science fiction writers, writing not so long ago.

## 7.

Charles Raab, writing with the undaunted Paul de Hert, unpacked Lawrence Lessig's taxonomy of regulation, invoking the assistance of the writings of Christopher Hood. Deng Hifeng explained the approach being adopted in China to differential prices for various forms of energy. It was a hard hitting description of the difficulties of securing effective and timely regulation of technology in China. It bore many similarities to the analogous problems faced in Western societies in introducing a carbon tax and promoting wind, solar and other forms of energy to replace the use of depleting fossil fuels.

Professor Bert-Jaap Koops addressed fundamental questions about the survival of democratic and accountable government in the current age of pervasive technology. Like Professor Lessig, he posed the question: If 'Code' is built into technology and individuals are thereby excused from the civic choice to conform, or to contest, the regulations, will we lose our sense of good and bad conduct and of our civic responsibilities to infuse our actions with moral values debated in society with fellow citizens?

T J McIntyre introduced the conference to webfilters such as *NetNanny* and British Telecom's *CleanFeed*. Surprisingly, he described how a gay website in Saudi Arabia was unblocked because the Saudi government had helpfully provided an appeal mechanism and criteria by which appeals might be decided. He contrasted both the Saudi mechanism and its unexpected outcome with the more rigid filters operating in Britain and other parts of Europe, without equivalent

facilities for review. He too expressed concern at the implications of over-reaching filters for civic debate and the democratic voice.

Professor Mireille Hildebrandt painted the picture of future information technology. She described how, before long, computer software will detect that the user is getting tired and wants a break causing equipment in the kitchen automatically to prepare fresh pot of coffee. This is all very well. But what of the human entitlement to make such choices? More importantly, what of the human need to think and to interrupt other functions for social intercourse and human interaction? The vision of the future of ambient law at last provoked the conference host, Professor Roger Brownsword, into an exclamation demanding that the world be stopped so that those, anxious about where we are going, might get off and regroup.

In the last session, Dr Karen Yeung addressed Professor Brownsword's concerns about repairing the democratic deficit and preserving the moral autonomy of citizens in the context of today's technology. Each of these concerns is inter-related. Each is prompted by the legitimate expectations of individuals to play a useful role in their community. Democratic participation and moral autonomy are vital aspects of citizenship. How are these attributes to be preserved?

Karen Yeung illustrated her thesis with a familiar example. The introduction of machine readable tickets in the London Underground, replacing the human agents who previously manned the barriers and

punched the tickets, preserved some respect for individual moral choice. Metal impediments were installed to stop passengers passing too readily over the electronic entry points. Yet passage was not rendered completely impossible. A passenger ready, in a very public way, to leap the impediments, could still do so in London.

In the Paris Metro once I was myself, by the loss of my ticket, the absence of funds and urgent necessity, forced to make that leap. It would be impossible now in some Paris stations where total metal obstructions have been installed to restrain leaping, whatever the predicament. Yet if all exceptions are forbidden (and rendered physically impossible in this way) by the incorporation of rigid unbending regulations written in software or in the mechanical design, citizens may not only lose the possibility of escaping from a dire situation. They may lose the chance of demanding that their society recognise the need in human existence for exceptions and provide means to assess and uphold them.

The final presentation by Ben Bowling described the advancing role of technology as a "force enabler" for modern police and security agents deemed necessary to preserve a secure world. The extent of the penetration of surveillance technology in the United Kingdom was portrayed in a rather frightening form. The "mosquito", a device with an irritating signal seemingly targeted at the sensitive auditory nerves of teenage crowds, illustrates vividly the possibilities of the technology of law and order that lie ahead. The more that one becomes aware of such

technology, the more most contemporary lawyers will be propelled to demanding effective democratic debate about its use and controls over its deployment.

### THE FUTURE

This conference marked the launch of TELOS. A glance at this report will demonstrate, even to the most sceptical, the variety of the issues raised, the importance of the topics considered and the danger of doing nothing to envisage, and carry forward, the efficient regulation of technology where that course is judged beneficial and necessary.

No doubt TELOS, so well launched, will go on to establish a network amongst those lawyers and others who are interested in the developments of technology of special relevance to the law and concerned about the potential democratic deficit identified during the deliberations.

Future conferences will need to broaden the scope of the technologies addressed, so that they include participants with expertise in nuclear technology, the technologies of energy and global warming and of explorations of the biosphere and outer space. They will need to widen the participation of those who describe developments in other parts of the world, including Russia and India, both countries of large significance because of their technological capacity. Participants from

poorer countries will be essential so as to reflect the diversity of humanity.

There will also be a need to deepen the examination of law so as to include case studies of effective as well as ineffective attempts to regulate technology by municipal law in addition to those attempts that are now emerging from international agencies designed to address global technology on a transborder basis. Finally, it will be necessary to extend the fields of expertise of participants. The involvement of political philosophers, of persons who sometimes advocate more vigorous regulation, of civil society organisations, law reformers, politicians and legislative drafters would enlarge the pool of expertise in essential fields.

The TELOS conference demonstrated that regulating technologies is not a matter appropriate to purely verbal analysis of the traditional legal kind. We cannot find the way ahead by reading judicial reasons of our predecessors, however learned they may have been. In default of more effective solutions, the common law system offers judges to fill the gaps left by lawmakers<sup>2</sup>. Sometimes this is necessary. But a more coherent solution is desirable. The conference has opened a dialogue as to how that solution may be offered.

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<sup>2</sup> Recent illustrations include judicial decisions in cases of "wrongful birth" and "wrongful life". See eg *Cattanach v Melchior* (2003) 215 CLR 1; ([2003] HCA 38) and *Harrington v Stevens* (2006) 80 ALJR 791; [(2006)] HCA 15); cf *McKay v Essex Area Health Authority* [1983] QB 1166; *Gleitman v Gosgrove* 227 Atl Rep (2d) 689 (1967) and *Curlender v Bio-Science Laboratories* 165 Cal Rptr 477 (1960).

A great judge, and one of my predecessors in the High Court of Australia, Justice Windeyer, once declared of the relationship between law and medical technology, that the law generally marches in the rear and limping a little<sup>3</sup>. Windeyer was a soldier as well as a judge. He knew what he was talking about when he used this metaphor. In the intervening years since he offered his description the gap that he discerned has widened. The institutional problem has deepened. That is why the TELOS conference was important, useful and most timely.

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<sup>3</sup> *Mount Isa Mines Ltd v Pusey* (1970) 125 CLR 383 at 395.

