P.R.I.M.E. FINANCE CONFERENCE 17 October 2019

Jones Day, 250 Vesey Street, New York

Legal ethics in an age of evolving technology

Technology, Global Issues and International Law

Technology is an ever-evolving aspect of the *domestic* law of every State, which my colleagues have addressed. At the launch of his new book *Tools and Weapons: The Promise and the Peril of the Digital Age*[1] Brad Smith, CEO of the world's biggest technology company, Microsoft, added a demand for stricter *international* rules over emerging forms of artificial intelligence.[2] Further, he characterizes the Christchurch New Zealand massacre as an inflection point, called by the *New York Times*:

> … an internet-native mass shooting, conceived and produced entirely within the irony-soaked discourse of modern extremism.[3]

The theme is the influence of global media

> The attack was teased on Twitter, announced on the online message board 8chan and broadcast live on Facebook. The footage was then replayed endlessly on YouTube, Twitter, and Reddit, as the platforms scrambled to take down the clips nearly as fast as new copies popped up to replace them.

The symptom of terrorism is not only the agony of victims and their family but, as Smith emphasizes, it can:

> … involve international efforts to undermine the social stability on which societies depend.[4]

[1] (PenguinRandomHouse 2019)
[2] Robin Panamenta *The Telegraph* 21 September 2019
[3] *Tools and Weapons* p99
[4] P100

There is fundamental, and obvious, need for the law and legal ethics to play their part in deterring and responding to threats and commission of such conduct. It falls within any rational concept of terrorism.

As background to this contribution to "Legal ethics for global issues of evolving technology" – namely **Technology, Global Issues and International Law -** you will have received a paper I gave to this conference last year - *Ethics for Counsel and Arbitrators in Complex Disputes*[5]. It described "ethic" as a set of moral principles, especially ones relating to a particular form of conduct. "Ethics" are those moral principles. Law, and compliance with it, are each an expression of ethics.

I begin with two statements of principle. First, a decade ago Professor Golden challenged the non-recognition in the ABA's Model Rules of Professional Conduct of the realities of globalisation and developments in technology. The comment to Model Rule 1.1 Competence now states:

> "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with *relevant technology*, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject."
>
> (emphasis added)

Second, on 2 September 2019 President Yusuf of the International Court of Justice, opening at the Peace Palace in The Hague the Second World Meeting of Societies for International Law, identified three fundamental ethical challenges for international law:

> (1) its capacity to serve human society….
>
> (2) its actual application to matters of common concern to humanity and to the commons. We have declared biological diversity to be of common concern to humanity, and we see it gradually disappearing before our eyes. We have declared climate change and the rising of the oceans a common concern of humanity, but we are struggling to have the law properly

[5] (2019) 25 Comparative Law Journal of the Pacific 5-26

> applied and extended to them. This is an area in which we need innovative and daring proposals and solutions by international lawyers. We no longer have the luxury of waiting to see how the practice of States evolves in these areas. We need avant-garde legal action…
>
> (3) its ability to grapple with the impact of rapid technological advances on human rights and freedoms. Today, individual freedoms, individuality and independent thinking are at risk of being affected or even manipulated by technological tools in the hands of few major corporations in the most stealthy and Orwellian manner. Legal defenses need to be built against abusive behaviour arising from the use of such technologies.

Another address by the President, to the Instituut de Droit International on 26 August 2019. describes new challenges to international law, including the " elementary considerations of humanity" on which major international obligations are based; repudiation of international agreements; and shunning of Multilateralism.

Within that context this paper addresses the global dimension of legal ethics and technology under four headings: learning; responding; educating; and adapting.

Learning

Before getting to ethics there is much to learn about technology, in both fact and law.

As to fact, Brad Smith has cited lethal autonomous weapon systems as posing a host of new ethical questions which need to be considered by governments as a matter of urgency. He advises that several States

> are all developing weapons systems with a significant degree of autonomy in the critical functions of selecting and attacking targets. Flying, swimming or walking drones can be equipped with lethal systems – missiles, bombs or guns – which could be programmed to operate partially or entirely autonomously and "ultimately will spread … to many countries. Replacing troops with machines can make the decisions to go to war easier.

> But it remains unclear who is responsible for deaths or injuries caused by a machine – the developer, manufacturer, commander or the device itself.[6]

The decision-maker must properly understand the new systems. During an internet conference in The Hague an embassy invited half a dozen internet experts attending, including one of its inventors, to meet three judges from different courts/tribunals, for cross-disciplinary discussion. The range and scope of new directions of e-development, as well as their pace, requires the law to evolve in an informed manner. Judges, arbitrators and other decision-makers can require education beyond the evidence, submissions and oral arguments of counsel.

So in the UK, with the consent of the parties, the final court organized a series of *in camera* pre-hearing seminars in biochemistry by an Oxford professor in a patents appeal turning on DNA technology. A participating judge said:

> The work Professor Yudkin did by means of these carefully prepared seminars enabled all those involved to concentrate on the issues of law involved in the appeal without having to spend a good deal of extra time in the course of the hearing on learning about the technology. This had the result of shortening the length of the hearing by several days. … there was no dispute about the technology. I suggest that it is a course which might usefully be adopted in the future in cases of this kind, where the technology is complex and the parties are willing to consent to it. [7]

Fifteen years ago a leading scholar of both public and private international law concluded:

> The defining characteristic of the age has been the phenomenon of globalisation. As Lord Mustill has recently observed: "The essence of culture is heading now, not towards internationalisation but non-nationalisation." [8]

Crosscurrents of populism have since complicated what remains a topical assessment.

---

[6] https://www.telegraph.co.uk/technology/2019/09/21/microsoft-chief-brad-smith-says-rise-killer-robots-unstoppable/

[7] *Kirin-Amgen Inc v Hoechst Marion Roussel Ltd* [2004] UKHL 46, [2005] 1 All ER 667, 703 para 135 (HL) per Lord Hope.

[8] Professor Campbell McLachlan QC "International Litigation and the reworking of the conflict of laws" (2004) 120 LQR 580

When we turn to focus on ethics in the rapidly developing fields of technology and international law there is need to clarify what we are talking about.

First, what do we mean by the term "international law"? (I come later to "private international law", alias "conflict of laws", with which practising in a Federal system you are of course fully familiar). Although Jeremy Bentham had devised that name in 1789[9] for what had previously been known as "the law of nations", in 2014 the Court of Appeal of England and Wales still found it necessary to explain:

> 115 … a fundamental change has occurred within public international law. The traditional view of public international law as a system of law merely regulating the conduct of states among themselves on the international plane has long been discarded. In its place has emerged a system which includes the regulation of human rights by international law, a system of which individuals are rightly considered to be subjects.[10]

Yet in 2017 Oxford's best-selling legal text bore the title *Is International Law International?*[11] An Australian international lawyer with experience in London who is also a reporter for the Restatement (Fourth) of the Foreign Law of the United States, Professor Anthea Roberts described a basic problem as to what the term means. She reported that some in the USA use "public international law" to mean what in other States is known as "foreign law", rather than the "international law" just described in *Belhaj*. That can mean we are talking past one another instead of concentrating together on the problems and solutions. Professor Harold Hongju Koh offers another term. He speaks of "transnational law – the hybrid law that combines domestic and international, public and private law".[12]

[9] J. Bentham, *An Introduction to the Principles of Morals and Legislation*, edited by J.H. Burns & H.L.A. Hart (London, 1970).
[10] *Belhaj v Straw* [2014] EWCA Civ 1394, [2015] 2 WLR 1105, appeal dismissed [2017] UKSC 3, [2017] AC 964
[11] (Oxford 2017)
[12] *The Trump Administration and International Law* (Oxford 2019) 7.

A further question concerns the creation of public international law. While it can be created by other means, among them treaty or State usage,[13] as I noted last year Lord Mance of the UK Supreme Court has recognized that[14]:

> 148 …The role of domestic courts in developing (or … even establishing) a rule of customary international law should not be undervalued… the intermeshing of domestic and international law issues and law has been increasingly evident in recent years. Just as States answer for domestic courts in international law, so it is possible to regard at least some domestic court decisions as elements of the practice of States, or as ways through which States may express their opinio juris regarding the rules of international law. The underlying thinking is that domestic courts have a certain competence and role in identifying, developing and expressing principles of customary international law.

Justice Breyer has similarly argued, in *The Court and the World: American Law and the New Global Realities,*[15] that international law requires the assistance it can receive from such courts:

> … the Supreme Court must increasingly consider the world beyond our national frontiers. In its growing interdependence, this world of laws offers new opportunities for the exchange of ideas, together with a host of new challenges that bear upon our job of interpreting statutes and treaties and even our Constitution…new realities give rise to legal questions affecting not just foreigners but Americans as well. There is no Supreme Court of the World to answer these questions for us… [T]he world will follow someone's example if not ours… It is … the need to maintain a rule of law that should spur us on, jurists and citizens, at home and abroad, to understand these challenges and to work at meeting them together.

By happy coincidence, development of the theme by Dr Daniel Peat is occurring today in The Hague at the launch of his book *Comparative Reasoning in International Courts and Tribunals*[16].

[13] Statute of the International Court of Justice Art 38(1)
[14] in *Al-Waheed v Ministry of Defence* [2017] UKSC 2, [2017] 2 WLR327drawing on Lauterpacht's earlier article "Decisions of Municipal Courts as a Source of International Law"10 British Yearbook on International Law (1929) 65-95 and later writings, especially by Sir Michael Wood.
[15] Alfred A. Knopf New York 2015 pp281-4

[16] (Cambridge 2019)

Anthea Roberts could have tweaked her title to address an even more fundamental topic - *Is International Law Law?* Of course it is for the most part, giving rise to an ethical obligation to comply with it. How else could international obligations be enforced? Yet a further basic topic is whether courts and arbitrators are bound to comply with a presumption that a State's domestic law conforms with its obligations at international law. The leading text *Oppenheim's International Law* [17] states as an established rule of English domestic law "William Blackstone's assertion that 'the law of nations is part of the law of England'".

That decision accords with the judgment of the UK Privy Council, consisting of judges of the final UK court, in *Boyce v R (Barbados)* (2004).[18]

Yet in 2015 a seven member panel of the UK Supreme Court stated, to the contrary:

> a *domestic decision-maker exercising a general discretion*
>
> (i) *is neither bound to have regard to this country's purely international obligations nor bound to give effect to them,* but
>
> (ii) (ii) may have regard to the United Kingdom's international obligations, if he or she decides this to be appropriate.
>
> (emphasis added).[19]

What does that mean for legal ethics?

I leave to those learned in US law the position in this country, on which the late Justice Scalia expressed certain views.

Responding

There is no novelty about the need for law to respond legal challenges of new technology. They are of course the *raison d'être* of every kind of intellectual property.

[17] (9th edition): Volume 1 Peace. Ed. Sir Robert Jennings QC, Sir Arthur Watts KCMG QC (Oxford) para 19(1))
[18] [2005] AC 400, [2004] UKPC 32
[19] *R (Wang Yam) v Central Criminal Court* [2015] UKSC 76, [2016] AC 771

But having understood any new system the decision-maker must then characterize it, either by deciding what existing principles should apply or by adapting those principles to bring them up to date.

Some issues as to response were underlined by a *New York Times* report of August 28.[20] It recorded a secret cyberattack against Iran on 20 June which wiped out a critical database used by Iran's paramilitary to plot attacks against oil tankers in the Persian Gulf. That was said to have provided in response to a drone attack a proportionate measure calibrated to stay well below the threshold of war. There are opposing arguments on the point.[21]

Nowadays drones loaded with explosives are so cheap and readily available they can be used in great numbers, programmed to swarm like bees in patterns beyond the capacity of human response, so Artificial Intelligence is needed to help cope with them.

But they also require consideration of how existing legislation and jurisprudence in the domestic law, which my colleagues have discussed, are to deal with them. There is need not only to cope with unfamiliar facts, which is why modern courts, including the UK Privy Council and the Trial Chamber of the Special Tribunal for Lebanon, have permitted the use by counsel of video technology and of a scene model respectively to help communicate undisputed historical and geographical complexity to the court. There is also need for the legal innovation called for by President Yusuf, to which I will return.

In the wake of a recent New Zealand class action decision against company board members, who include a former Prime Minister,[22] a report *Always on Duty: The Future Board* [23] has contended for radical change in how directors operate. It notes[24]

> Boards have to be across a staggering array of complex and diverse issues. They also need to be responsive to ballooning stakeholder demands and expectations. New laws targeting

[20] https://www.nytimes.com/2019/08/28/us/politics/us-iran-cyber-attack.html

[21] *New York Times* report of September 2 2019 https://www.ejiltalk.org/did-the-us-stay-well-below-the-thrshold-of-war-with-its-june-cyberattack-on-iran/

[22] *Mainzeal Property and Construction Limited (in liq) v Yan* [2009] NZHC 255 (26 February 2019)
[23] by the New Zealand Institute of Directors and the law firm Minter Ellison
[24] https://www.iod.org.nz/Portals/0/Publications/IoD%20Always%20on%20duty-%20the%20future%20board.pdf?ver=2019-09-05-162739-047

directors personally, active regulators, and the rise of litigation funding are also adding to the load. However despite significant change in the operating environment, including disruption to many business models, boards are operating in much the same way they always have.

It records as the first theme for a future-focused board:

- **Shareholder primacy v stakeholder theory**

Today, the issue is not whether a company should account for stakeholder [as distinct from shareholder] interests but rather the extent to which it should. In the decade since the Global Financial crisis corporate governance regimes around the world have been reformed and strengthened, swinging the pendulum away from shareholder primacy, and giving more recognition and weight to stakeholder interests.[25]

It concludes:

Technology has the potential to fundamentally change the way boards meet, breaking down global barriers with virtual reality, holoportation and instant voice translation. Technology should also help transform the way boards operate to ensure directors are more informed and equipped to monitor organisations and make decisions. Artificial intelligence in particular is expected to play a greater role in augmenting board decisions especially with real time data and analytics and this may lead to a revolution in reporting.

The ethical standards required by law require sharp focus on social realities. Dr Willem Calkoen, a founding Board member of P.R.I.M.E. Finance, in *The One-Tier Board in the Changing and Converging World of Corporate Governance*, [26] contrasts societal differences between Britain (now strikingly borne out by *R (on the application of Miller) v The Prime Minister*[27] - the recent eleven judge case about prorogation of Parliament) with its:

[25] You will recall the "statement statement endorsing [not just shareholder] but stakeholder capitalism, signed [last] month by virtually all members of the US Business Roundtable, [which] has caused quite a stir", of which the Nobel laureate Joseph Stiglitz writing in *The Guardian* expressed both relief and a degree of scepticism, concluding: "… we need legislative reform … so that corporations are not just allowed but actually required to consider the effects of their behaviour on other stakeholders": https://www.theguardian.com/business/2019/aug/29/can-we-trust-ceos-shock-conversion-to corporate-benevolence

[26] Klwer (2012)

[27] [2019] UKSC 41

> reluctance to commit to rigid, unchangeable rules…not all principles of governance necessarily need to be pinned down in formal laws.
>
> a close knit society where people could rely on precedent. UK leaders still like to see themselves as pragmatical, which reinforces the will to have informal regulations.

and the US, with its focus on the written constitution.

And in the vital, sensitive, and evolving field of military intelligence the Pentagon is seeking an "ethicist" to oversee it.[28]

Educating

In a recent essay a French writer described the need for economists to break out of the narrow mindsets and vocabulary of their specialism and to communicate with members of the community affected by economic considerations in terms they can understand. She chose the title "Vulgariser n'est pas vulgaire". [29] The same ethical need exists in law in two respects. First, it must learn to evolve to deal with novel techniques, a topic to which I will return. So the Special Tribunal for Lebanon, responding to the use of explosive to blow up a political target, was required to consider whether it was lawful to acquire and employ the metadata of every telephone call made in that State over a period of 7 1/2 years to identify the bombers' means of communication.[30]

Secondly, law and its use must be recognized as the property of the people it governs. To handle the complex topic of technology it may need to be complex. The Special Tribunal for Lebanon considered that people have an ethical entitlement of ready access to the evidence. So it used state of the art technology to provide public outreach, live streaming its proceedings in Arabic, French and English, to explain to the people what was being done in the name of international criminal law. It provided as well annual courses of lectures, which

---

[28] *The Guardian* 7 September 2019 https://www.theguardian.com/us-news/2019/sep/07/pentagon-milit... "We are thinking deeply about the ethical, safe and lawful use of AI"

[29] *Le Monde* 18-19 August 2019 p27

[30] *The Prosecutor v Ayyash* Appeals Chamber Decision on Appeal against decision on the Legality of the Transfer of Call Data Records Case No: STL-11-01/T/AC/AR126 28 July 2019 *STL Casebook 2015 361*

participants have described as an effective contribution to reconciliation following the civil war.

Adapting

Legal professionals are often called on to respond to technology emerging and evolving at an ever-increasing rate. How are legal ethics to keep pace?

In the leading English case *National Phonograph Company, Limited v. Edison-Bell Consolidated Phonograph Company, Limited*, (1880) 6 Q.B.D. 244 the question was whether the monopoly rights which an Act of 1869 had given the Postmaster General for telegraphs were infringed by the operations of a telephone company. Although the patents for the telephone had not been granted until eight or nine years later, and the system did not exist in the UK until a decade later, a Divisional Court of the Exchequer Division held it fell within and was infringed by the broad language of the Act and granted declarations, an injunction and an account against the company.

A recent aviation systems failure is said to "have much to do with what is euphemistically called the 'culture' of [a] particular facility within Rolls-Royce's immense engineering establishment" and coming close to catastrophic disaster. Its causes, and results in the airspace of Singapore and Indonesia affecting a Qantas Airbus "superjumbo" aircraft with 469 people on board, are graphically described in Simon Winchester's *How Precision Engineers Created the Modern World*.[31] The need for the law and practice of systems safety to keep pace with modern technology has been recognized by the International Civil Aviation Organization. [32]

A valuable lead was recently given by Roberts CJ in *Carpenter v United States* 585 US __ (2018) (22 June). It shows the importance of correct legal classification, or characterisation, of a cell-phone as being more than a mere diary, to which less rigorous standards of admissibility usually apply. The Government acquired cell-site records of the appellant giving the Government near perfect surveillance and allowing it to travel back in time to retrace his whereabouts. There was invasion of a legitimate expectation of privacy. The legislative authority relied on

[31] (William Collins 2018) 173.

[32] ICAO Circular 247-AN/148 *Human Factors Digest No 10 Human factors, management and organisation*

did not apply the exacting standard of the Fourth Amendment, which requires for such intrusion a warrant supported by probable cause. There was "unreasonable search and seizure".

The Chief Justice held for the majority:

> the rule the Court adopts "must take account of more sophisticated systems that are already in use or in development … In mechanically applying the third-party doctrine to this case the Government fails to appreciate the lack of comparable limitations on the revealing nature of [the new technology]".

As to cyber warfare, Peter Margulies' essay "Sovereignty and cyberattacks: technology's challenge to the law of State responsibility" (2013) 14 Melbourne Journal of International Law 1-24. It argues that cyber threats pose fresh challenges to sovereignty and to international law. It points out that in addressing kinetic attacks – using physical force, like Guy Gibson's famous bombing raid on the German dams - international law defines state responsibility narrowly. Leading cases include those of the International Court of Justice in *Nicaragua v United States* [1986] ICJ Rep 14 and of the International Court for the former Yugoslavia in *Prosecutor v Tadić* (Appeals Chamber Case No IT-94-1-A, 15 July 199 paras [131] and [145]. The topic is discussed by the International Law Commission's *Draft Articles on Responsibility for Internationally Wrongful Acts* and in the *Tallin Manual on the International Law Applicable to Cyber Warfare.* Margulies identified the fact that cyber attacks do not entail the physical force historically implicit in its prohibition by Article 2(4) of the Charter of the United Nations; other experts advise "the consensus is that Article 2(4) prohibits only armed force" - while cyber-attacks may violate the customary norm of non-intervention or a related international law norm, that does not necessarily mean that armed force may be used in response. [33]

So if in peacetime[34] Guy Gibson had stayed in England and manipulated electronic controls to open the gates of the Möhne, Edersee and Sorpe dams in the Ruhr, with the same results as the bouncing bombs dropped from his Lancaster bombers, what would the law have said? There are arguments for abandoning history in favour of consequences.[35] But clarity is

[33] According to Hathaway & ors "The Law of Cyber-Attack" 100 California Law Review 817, 842 (2012) (843).
[34] so the law of war and peace, alias International Humanitarian Law, provides no answer
[35] N33 at 848.

better. Do we need to amend the language of the UN Charter to deal with non-violent but unauthorized remote opening of dam gates?

Conclusion

The 1924 edition of *Hall's International Law* noted:

> Looking back over the last couple of centuries we see International Law at the close of each fifty years in a more solid position than that which it occupied at the beginning of the period.[36]

In another important overview, President Yusuf of the International Court of Justice described the need to:

> … recognise the ephemeral nature of legal rules… recognise that the rules exist only because and for the benefit of the society that they serve … recognise that rules evolve, grow, fall into desuetude because of the changing needs of society. Most importantly, … recognise that it is their job to identify, propose, and effect these changes in practice. …[37]

I now turn to private international law, alias conflict of laws, which concerns the interface between competing rules of domestic law in cross-border transactions. It has traditionally been seen as a component of the intersecting domestic laws created by the relevant States, and distinct from public international law, historically been seen as the non-State law governing inter-state relations. But recent writing, such as Alex Mills' *The Confluence of Public and Private International Law*[38] has shown the need for deeper analysis than such simplistic labelling.

Likewise, modern technology both contributes to and can help mitigate the global warming which gives us a twelve year window to avoid permanently irretrievable damage to the

[36] P xxv
[37] http://cassese-initiative.org/2017/09/fifth-antonio-cassese-lecture-the-role-of-international-lawyers-between-theory-and-practice/

[38] (Cambridge 2009)

environment. That brings home the need for the law to recognise an ethic of global citizenship via the innovative and daring proposals and solutions by international lawyers demanded by President Yusuf.

That is not to ignore the reality of policy and ethical differences among States. Take for instance counsel's obligations as to citation of authority. It is a practice of certain civil law States to apply what Roland and Boyer *Adages du Droit Français* (Litec 1999) p363 attribute to "ancienne jurisprudence"- the principle "Jura novit curia; La Cour connaît le droit" (the judge knows the law); <<Avocat passez au fait, la Cour sait le droit>>. By contrast, under the English common law counsel owe an ethical obligation to inform the Court of authorities inconsistent with their argument. Judges have found it necessary to restrain the deluge of authority now facilitated by modern search engines.

But does not the pace and complexity of modern science and engineering require assistance from counsel for even the most sophisticated judges or arbitrators to understand in true perspective the " more sophisticated systems that are already in use or in development" of which Chief Justice Roberts spoke?

It is not for a foreigner to enter the famous debate between Justices Scalia and Breyer as to the use of foreign law in the construction of a national constitution.[39] But as a common law judge sitting with civil law judges in a final international court I find it of the greatest assistance to be informed of relevant developments elsewhere. I expect that each of us – counsel and judges alike – is ethically required (I adopt the language of the Victorian Promissory Oaths Act) to "do right to all manner of people after the laws and usages of [our country], without fear or favour, affection or ill will".

I hope that, at least in time to come in our ever-shrinking world, the exercise of the privileges and duties as counsel or judge will be regarded as including the ever-developing international law with which our domestic law is presumed to conform, including the general principles recognised by nations, stated in Article 38 of the Statute of the International Court of Justice. Pointing that way is an essay in the latest part of the International and Comparative Law

[39] Sinša Rodin "Constitutional Relevance of Foreign Court Decisions 64 The American Journal of International Law 815 (2016).

Quarterly[40] which sees rapprochement between investment treaties and human rights treaties – each expressing a value of profound international importance.

David Baragwanath

[40] JH Fahner and M Happold "The Human Rights Defence in International Investment Arbitration: Exploring the Limits of Systemic Integration" *ICLQ* vol 68, July 2019 pp 741-759