THE 2020 SIR NINIAN STEPHEN LECTURE

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COURTS AND TECHNOLOGY – PIVOTING FROM CHAOS TO THE UNKNOWN

1 I will begin with two important things before I turn to address the topic posed for this year's lecture.

2 The first, to acknowledge what a great honour it is to have been invited to give this lecture in 2020 which, as it has turned out, is such a very difficult time in human history.

3 The COVID-19 pandemic, the worst the world has seen since the Spanish Flu a century ago, continues painfully to unfold across the globe. It has brought with it now over a million deaths, nearly 900 here; recession, Australia's first in some three decades and the worst we have experienced since the Great Depression; and even greater economic and social turmoil elsewhere.

4 This has become a time not only of illness and death, but border closures even between Australia's States; city and State wide lockdowns, some repeatedly; working from home; home schooling; online shopping and home deliveries; social distancing and facemask wearing; social catch ups, dinners and yoga using a variety of software programs; even some remote participation in our parliaments; as well as virtual court hearings.

5 While virus weary we continue hopefully into summer, all the while watching in horror as the infection and death rates in other parts of the world spike to unspeakable levels, as winter there unfolds. Together we all wait anxiously for the development of effective vaccines and treatments, within time frames for such scientific advances never hoped for to this point in human history.

6 This truly is a moment when not only Australia's civil society, but humanity as a whole faces challenges on a scale we have not had to manage before, given the size of our current populations. These are difficult challenges which

we will have to continue meeting, during times ahead which may yet be darker than we would wish.

7 I am thus very humbled to have been invited, at such a time, to join the ranks of those who have given this lecture over the years since 1993, when Sir Ninian himself gave the first.

8 And I am grateful to the University for the chance to share my thoughts with you about what has been unfolding in the courts, utilising technology which had not been acquired with these challenges in mind; and the opportunities and challenges which still lie ahead.

9 When Sir Ninian spoke about 'Our Democratic Constitution' in 1993, the year I was first appointed, life was certainly very different.[i] I want to touch on parts of his lecture today, because I think what Sir Ninian then explained helps cast a light on the path ahead for our society, courts and the technological advances which may become available to be used in them, in the future.

10 Sir Ninian of course brought a particular perspective to his topic. Like many of us he was an immigrant to this country. After great success in legal practice he became not only a judge of the Supreme Court of Victoria, but also of the High Court and then Australia's Governor General. The last phase of his distinguished career was international. After so many years of public service in Australia, Sir Ninian went on to accept appointments as Australia's first Ambassador for the Environment; chair of part of the Northern Ireland peace talks; a judge of the International Court of Justice and later of international tribunals investigating war crimes in Yugoslavia and Rwanda; before becoming a special envoy of the UN Secretary General, charged with helping resolve political conflicts in Bangladesh.

11 Not many will match even some of these achievements. Certainly the opportunities for such an international career may be fewer for a time, even for the best and brightest amongst us.

12 In the lecture series named for him Sir Ninian has been followed by distinguished speakers who have examined other important legal issues. But no-one forecast what has come to pass this year, which makes what Sir Ninian spoke about in 1993 of particular interest.

13 The second important thing is to respectfully acknowledge the traditional owners of the lands where we meet or are physically located and to pay my respects to their Elders past, present, and emerging. In the case of the University, they are the Worimi and Awabakal people and in my case, they are of course usually the Gadigal people of the Eora nation.

14 In this difficult time it would also be amiss not to acknowledge the aeons of their connection to our land and how together with them we face this difficult point in human history. Even when the pandemic began we were painfully aware that our legal system did not always serve our Indigenous peoples as well as it should; that they sadly continue to be overrepresented in our prisons and amongst those who are the victims of domestic violence; and underrepresented still, despite the progress which has been made in recent years, in areas of high achievement, not because of lack of capacity, but because of ongoing lack of opportunity and the consequences of past and present disadvantage.

15 The care which the courts have taken during the pandemic to ensure that our legal systems not only continue to function, but achieve real improvement is important to all members of our society, but especially for our Indigenous peoples.

2020 - a moment of chaos

16 I thus raise in this lecture about courts and technology, in what I have described as a moment of chaos, a question about the future. We all know what 'chaos' is – a state of utter confusion or disorder, wholly without organisation or order.[ii]

17 Unfortunately in 2020 that is a state towards which too many parts of the world are being driven by the impact which the Covid-19 virus continues to have even on our most advanced societies, both socially and economically. As we know some of the worst affected have been truly unexpected. In Australia we have been fortunate not to number amongst them, at least to this point.

18 But chaos is a state which Australia had to work hard to avoid and which we are still together striving to resist, knowing that there have been a number of regrettable missteps, which have resulted in significant problems and all too many deaths.

19 We have seen breaches of hotel quarantine regimes; widespread outbreaks and too many preventable deaths in the aged care sector; ongoing State border closures and repeated lockdowns. They contributed to the very significant, adverse economic and social consequences which Australia is suffering. We also know from ongoing investigations that those problems have affected the more vulnerable members of the community much more significantly than those of us who are well off, given the job losses and business closures which have resulted.[iii]

20 Australians are not only still trying to understand and redress our missteps, but to ensure that they are not repeated. These ongoing investigations may yet lead to proceedings brought before our courts, concerning their consequences and who is responsible for them.

21 But it should be acknowledged that the efforts which have been made to deal with the effects of the pandemic have also led to some unlooked for advances. That included in our courts, when they had to pivot, utilising available technology in order to avoid a descent into the chaos which threatened.

22 The courts' approach was driven by people being confined to their homes by public health orders which precluded them from the easy access which they

have always had to Australia's courts. Orders which are constantly being fine-tuned, as are the courts' practices, as our situation alters.

23 The steps which were implemented helped ensure that despite this unlooked for physical isolation, people's practical access to the courts was preserved across the country.

24 Thereby the rule of law was maintained and justice delivered at times when it was sorely needed, albeit in some cases, especially in the criminal courts, at a much slower pace than we were used to.

25 What was done was only possible because of access to computerised court systems. In Australia the internet, computers and smart phones already permitted such access not only by legal practitioners, but also the media and the public generally, very large parts of our population being computer literate.

26 Thus the High Court, for example, was able to establish its Video Connection Hearings protocol. It advised participants that they were expected to connect to hearings from devices such as laptops, iPads, tablets, or smartphones with a suitable camera and microphone, with 4G connections not being reliable and broadband connectivity being preferred. Other courts also implemented and fine-tuned their protocols, in constant consultation with the professions.

27 This was not necessarily a possibility in less developed parts of the world.

28 What also helped drive back chaos in Australia's legal world was that we already had widespread, free access to online resources such as parliamentary records, statutes, court practice notes and case law. All of these tools were only a relatively short time ago simply not available here, but in 2020 in common use and so made participating in court proceedings from home, a practical reality for very many of us.

29 This reflected that Australians have been early and enthusiastic embracers of technological advances and that the courts were not far, albeit some distance, behind in their embrace of the possibilities that the digital world had opened.

30 Thus in recent years courts and the institutions established to support them, such as the Judicial Commission of New South Wales and the National Judicial College, have been providing judges not only with digital tools such as online bench books and sentencing statistics, but ongoing education about how technology is advancing and can be used in judging.

31 The result in 2020 was that courts were quickly able to increase their use of the technology available to them to ensure their continued operation online, even when the pandemic caused the closure of many other of our institutions and businesses.

32 How difficult this was at times should not be underestimated.

33 There were not only hardware and software problems to manage, but band width and Wi-Fi problems and many, many people problems. There was much which had to be learned in a short period of time both about the difficulties and opportunities which the courts faced, as they continued their operations.

34 But the result has been positive changes which the courts will continue to embrace and develop, as technology evolves. It is, after all, unlikely ever to be more primitive than it is right now.

35 What has been learned also confirmed some challenges which were already known and being examined and will still have to be met, no matter how far we have managed to come.

36 They included that there is still a real digital divide in our society; that the numbers of self-represented litigants accessing the courts continue to grow; that they need more help to navigate our legal systems and the courts; and

that there is an ongoing need for care to be taken both by the courts and those who access them, to ensure that new technologies do not create problems which our society will be able to ill afford, as happened with the Robodebt problems, to which I will return.

37 Such challenges still have to be faced and really have only been heightened, by all of the adverse consequences which the pandemic has brought and the myriad of uses to which our more limited funds will have to be put, in what is still an unknown future.

38 Against this background I propose to:

(1) take a snapshot of Australia's court system when the pandemic struck, given our unique constitutional arrangements;

(2) explain how the courts used available technology to contend with the unlooked for challenges which the pandemic brought;

(3) examine the changes which those responses and further technological advances may drive and the opportunities and risks which we are likely to have to confront, as a result; and

(4) consider some of the important things which will have to be remembered and guarded in future, as courts continue to embrace further technological advances.

39 In looking at that unknown I will also say something about the possible utilisation of artificial intelligence systems in our courts, given that AI has become a reality, the product of scientific advances rather than science fiction and the hurdles which that may present, given Australia's constitutional arrangements.

Australia's unique court system

40 Today Australia approaches its history of colonisation with a different understanding than people have had in the past. It is now appreciated that Indigenous peoples had their own laws and systems for aeons before colonisation and that the laws which the colonisers brought with them, were not equally applied to all who lived here, despite what may have been intended.

41 But the history of our courts began with the British colonisation, in the late 1700s, of what later became Australia. It was British common law which was applied by the Colonial courts, with the first State court, the Supreme Court of New South Wales established in 1823 by the Third Charter of Justice for New South Wales.

42 That Court, now one of the oldest continuing courts in the world, is given[iv] the jurisdiction "necessary for the administration of justice in New South Wales".[v]

43 This jurisdiction and that of all of Australia's other courts must be understood in the context of the Australian Constitution, brought into existence in 1901 by the democratic processes which Sir Ninian described in his 1993 lecture.

44 As he explained, this Constitution entrenched the three arms of Australia's government: legislative, executive and judicial, with the first Bench of the High Court being appointed in 1903. Other State and Federal Courts were established over time, each with its own statutory jurisdiction and the High Court finally became our highest appellate court in 1975.[vi]

45 Also entrenched in Australia's constitutional system was the continued existence of the High Court and the State Supreme courts over which it exercises supervisory jurisdiction.

46 The judges of Australia's courts comprise a judiciary independent of government, who exercise either or both the judicial power of the Commonwealth, or that of a particular State. All these courts now administer

a unified Australian common law system which has departed from that of other common law countries in various ways, blended with our unique mix of State and Federal legislation.

47 Australia also has large numbers of Federal and State tribunals and administrative decision makers administering a myriad of statutory functions, over which ultimately the High Court also exercises supervisory jurisdiction. Those decision makers must also adhere to applicable requirements. For example considering the right question; adhering to applicable rules of law; taking account of all relevant considerations; and no irrelevant ones. [vii]

48 This independent court system is the result of the limits imposed in the Constitution on the powers of Federal and State parliaments, discussed for example in *Kable v Director of Public Prosecutions* (NSW). As McHugh J discussed in *Kable,* those limits preclude both non judicial functions being given to Federal courts and State courts being given non judicial functions which give the appearance that the court is a part of the executive government; which are of such a nature as to result in the court losing its identity as a court; or which might lead to the conclusion that the court was not free of government influence, in administering its judicial functions.

49 Thus in *Kable* it was concluded that the NSW parliament could not legislate for imprisonment for what a person was likely to do, rather than had earlier done, when a sentence for earlier offending expired. The Constitution precluded the Supreme Court being made the instrument of a legislative plan, initiated by the executive government, to imprison such a person by a process far removed from the judicial process ordinarily invoked when a court is asked to impose a sentence of imprisonment, after a person is convicted of an offence.

50 In *Kirk* it was decided that a State parliament had no power to enact a privative provision which took from the NSW Supreme Court the power to grant relief on account of jurisdictional error by an inferior court, in that case the NSW Industrial Court, even though it too was like the Supreme Court, a

superior court of record. Thus the parliament could not remove the Supreme Court's supervisory jurisdiction over other State courts, that also being one of its defining characteristics.

51 What these and other High Court authorities establish is Australia's constitutional requirement that courts remaining independent of the other two branches of government, must always exist.

52 This reflects the constitutional framers' recognition that courts are not merely dispute resolution providers. Rather, by a human process which has very particular characteristics, developed over the centuries by the common law, their judges must deliver justice by exercising the State's judicial power, no matter who the parties before them are.

53 It follows that the requirements and characteristics of Australia's courts, which are given constitutional force, must always be borne in mind when they use technology in new or different ways. They begin with people having access to justice and that trials, whether criminal or civil, be conducted fairly, in accordance with the requirements of the common law principles of both open justice and natural justice.

54 Open justice helps ensure public confidence in the administration of justice by requiring, with limited exceptions, that what judges do be done in public and openly. This requirement is also given statutory life by legislation[viii] which requires that when making a suppression order a court take "open justice" into account as "a primary objective" of the administration of justice.[ix]

55 The requirements of natural justice, that adversarial trials be conducted fairly, begin with the right to be heard by an impartial judge. Trials end with the orders by which the court quells the controversy brought before it, by the judge explaining the conclusions reached in reasons given for judgment which satisfy the requirements discussed in *DL v The Queen*.[x] The giving of such reasons is a part of the judicial function and an expression of the open justice rule, which is also given a constitutional character by s73 of the Constitution.[xi]

56 As explained in *DL*, the content and detail of reasons given in a judgment vary with the jurisdiction which the court is exercising and the particular matter the subject of the decision. In the absence of an express statutory provision, in the criminal context a judge sitting without a jury must give reasons sufficient to identify the principles of law applied and the main factual findings on which the judge relied "so that the parties can understand the basis for the decision and an appellate court can discharge its statutory duty on appeal": at [32].

57 Whenever technology is used in courts these requirements have to be born in mind, as do relevant legislative requirements.

58 Thus when civil trials are managed, judges must nowadays give effect to the requirements of legislation such as the *Civil Procedure Act*.[xii] Section 56(1) specifies that the overriding purpose of that Act and of the rules of court is to "facilitate the just, quick and cheap resolution of the real issues in the proceedings." Parties have a duty to assist the court to achieve that purpose and their legal representatives and others an obligation not to cause a party to be put in breach of that duty.[xiii]

59 There are no similar requirements imposed in criminal proceedings, but legislation such as the *Criminal Procedure Act* [xiv] contain case management provisions designed to achieve similar ends. They give judges wide ranging powers to give directions for the conduct of the proceedings and impose duties on the parties to give pre-trial disclosure about a wide range of matters, intended to reduce what is in issue in the proceedings, which has to be resolved.

60 These legislative innovations reflect an ongoing concern in our society with issues of access to justice, cost and delay.

61 In the years before the pandemic struck such legislative initiatives helped drive Australian courts' embrace of technological innovation. But that also starkly revealed that there was a real technological divide in our society, which had to be carefully managed, if access to justice was not to be

practically denied. That divide only raised greater challenges for the courts when the pandemic led to people being confined to their homes.

62 With the pandemic there were legislative innovations like the insertion of s22C COVID-19 pandemic - special provisions into the *Evidence (Audio and Audio Visual Links) Act*.[xv] It provides for appearance by audio visual link, subject to the court's direction and specifies the matters which must be taken into account when making such orders. They include the interests of justice, having regard to matters such as the public health risk posed by the COVID-19 pandemic and the efficient use of available judicial and administrative resources.

63 The court must also be satisfied both that a party is still able to have private communication with a legal representative and has had a reasonable opportunity to do so. This legislation telegraphs some of the real challenges which had to be confronted in virtual trials, which on occasions limped along, as these requirements were met in situations where the litigants' access to the technology they needed was less than ideal.

64 With the lifting of lockdowns in some parts of the country and their reimposition in others, the picture which emerged was of some courts moving to a mix of physical and virtual hearings, while others had to continue virtually, still largely the position in Victoria. In the Supreme Court of NSW and other courts there is now a mix of virtual, in person and hybrid hearings being conducted.

65 This ongoing experience has demonstrated that as well as some obvious challenges, there are real benefits from the use which has been made of technology, which courts will embrace long term.

How did Australia respond to the unlooked for challenges brought by the pandemic?

66 The courts' responses to the pandemic need to be seen not only in light of this constitutional, legislative and common law framework, but also in the context

of what the courts and society as a whole were experiencing at the beginning of 2020, before the pandemic struck.

67 It may fairly be said that if there was then any complacency in Australia about the challenges which our society and its courts had to face and our capacity to rise to meet them, assisted by the widespread use of technology, there was a real basis for confidence that they would be well met.

68 Australia was a highly functioning constitutional democracy supporting a successful capitalist society, albeit one still having plenty of problems to contend with. Its court system adhered to the constitutional requirements I have discussed. Both the other two arms of government and the community gave almost universal support to the courts and the way that they were operating, although there was always a drive for improvement.

69 Ours was a civil society which, as a whole, supported not only the rule of law and the need for access to justice, but recognised that our vibrant economy, which had successfully weathered challenges over recent decades which had caused other advanced economies to falter, depended in part on the continued successful operation of the courts.

70 As the Chief Justice of Australia discussed in a March 2019 speech, Australia's strong legal systems, where its courts and tribunals were able to operate efficiently in a rule of law context, were attractive to investors.[xvi] The courts provided not only the framework within which commerce could operate, but also rational methods of adjudication, being institutions in which confidence could be placed for outcomes to be reached which were both impartial and according to law.[xvii] Australia's courts were not agents for change, nor did they develop the law to pre-empt social opinion, but sought to reflect current thinking.[xviii]

71 Kiefel CJ explained this by reference to *R v L* [xix] the rape in marriage case. There a husband who had been charged with the rape of his wife challenged the validity of the statute creating the offence, contending that the legislation

preserved the common law that there was a continuing obligation on the part of a spouse to consent to sexual intercourse. This was rejected as accurately reflecting the common law, with three of the judges observing that the Court "would be justified in refusing to accept a notion that is so out of keeping with the view society now takes of the relationship between the parties to a marriage." [xx]

72 This approach reflects that Australian society constantly changes and matures. In 2020 it was an inclusive and self - reflective society, which widely embraced that almost instinctively understood concept of fairness. One expressly adopted in many of our laws, laws which reflect the moral conscience of our society, to which they give practical effect when enforced, as Bathurst CJ discussed in his February 2020 Opening of Law Term Address.[xxi]

73 In early 2020 the challenges which our society confronted and which needed to be dealt with by our laws and courts were not only recognised and widely discussed in the media, other institutions and by the public, but many were actively being sought to be addressed.

74 Australia's challenges included problems such as the over representation of Indigenous peoples in our criminal justice system and concerns about implicit bias and discrimination against them in our courts and legal systems; the need for federal corruption investigating bodies; the challenges which a warming planet appeared to be bringing to this continent, where bushfires seemed to be worsening, as the catastrophic 2019/20 bushfire season had demonstrated; the need to improve equity in our society and to address the need for funding of childcare, to better support working families; and to reduce things like the incidence of domestic violence, gender inequity, reflected in an ongoing gender pay gap and harassment, even in the most senior positions in commerce and as the High Court sadly acknowledged at the height of the pandemic, even amongst its ranks; as well the seeming large scale failure of even some of our largest and most reputable employers, to pay those who work for them their lawful entitlements.

75 Like many societies Australia had limited means, serious challenges and difficult decisions always to make about the kind of society we would like to have and the one which we can afford, including in our court systems.

76 But unlike other comparable democracies, the choices Australia had made before the pandemic had also delivered us many positive things which we could be proud of and rose to defend. Not only a democracy people could actually participate in, which truly operated under the rule of law, but one which provided access to education; work for fair rates of remuneration and support for those who cannot find it; universal health care; financial support in retirement through superannuation and pension schemes; clean water, electricity, transport and emergency systems, all the while without people feeling the need to bear arms against each other, or seek to address their problems violently in the streets.

77 How did Australia get to this point?

78 Obviously this picture was the culmination of the combined contributions and effort of those who were transported here by the British; those who immigrated here from every corner of the globe; their descendants and importantly, of our Indigenous peoples. Australian society is both a reflection and result of all of the choices which all of those people have repeatedly made over time.

79 When the pandemic began having an impact in Australia in early 2020, the fundamental underpinnings of its fair society, the result of all of those choices held firm, despite how they were then tested.

80 Federal and State executive governments managed Australia's responses to the pandemic, supported by the parliaments, the courts and the vast majority of its people, who are working so hard to help protect and support each other. There can be no overpraising of the work so willingly done by those in our health services, police and defence forces, teaching, corrective and

emergency services, those who kept food, transport and energy systems functioning and all those who supported so many other spheres of our society.

81 The result has been that Australia has experienced relatively limited numbers of Covid-19 infections and deaths, by comparison to other developed countries, although this has not been uniform across the country. But support was given where it was needed.

82 We are still reflecting on our missteps, some of which continue to be investigated. In Australia, after all, we love to investigate and learn from our failures.

83 As I wrote this lecture Australia continued to strive for balance between saving lives, preserving health and supporting those people and businesses rendered vulnerable by loss of work and lockdowns. All the while its courts sought to ensure that they and the legal system they supervise continued to operate, so that the economy could rebound and function, in order to continue supporting the kind of society we want still to be living in, when the pandemic ends.

84 Australia's courts already had a track record of embracing technological advances and were not afraid to experiment with innovations, well knowing that there had been both past successes and failures in what had been attempted. Gageler J, for example, examined some of these in a 2014 speech.[xxii] His Honour then contended that digital enhancement of the courts had increased the accessibility of Australian and international judgments by their publication on the internet, but had also increased the complexity of what is involved when judges have to consider prior authorities, which may have to lead to an evolution of the way that they are considered in future cases.

85 But it was not problems of this kind which the pandemic created for our courts, which they rose to address by using the technology available to them.

86 Thus around the country Australia's courts pivoted, in an incredibly short time, embracing new ways of giving parties practical access to justice and hearing cases in ways which had not been planned for, or in some cases even imagined. Almost overnight courts began hearing scheduled cases in virtual courts, all the while ensuring that they continued to meet the common law and statutory duties I have discussed.

87 What was done so quickly even now seems breath taking in one sense, yet already commonplace in another, reflective of just how adaptable we all are.

What did the courts' pivots involve?

88 The use which Australian courts were already making of technological advances had not only been driven by their judges, but also by parliamentary innovation, the mechanisms by which court operations are funded and by those who appeared before them.

89 When the pandemic struck a large proportion of cases were still being commenced in the lowest to the highest courts, by applications being physically filed in registries. They were later heard by judges who sat in courtrooms physically open to the public. Generally the parties and/or their representatives appeared in person at the bar table, tendering physical documents, calling witnesses and advancing arguments. Judgments were physically delivered, albeit often then published online, particularly in the higher courts.

90 Computerised systems operating in some courts already allowed cases to be commenced by electronic filing; daily lists to be published electronically; paperless trials to be conducted; and courtrooms to be accessed remotely by parties, their representatives and witnesses, the media and even at times the public. Still there were problems encountered in practice, either with system design or operation.

91 The NSW Supreme Court's systems then permitted electronic filing and access to judgments posted online within minutes of delivery. The Court

routinely communicated its decisions to the public and media using social media such as Facebook and twitter. Parts of some proceedings were recorded and later televised or sometimes live streamed and it was common for parties and witnesses to participate in hearings remotely, by use of audio or audio-visual systems.

92 In the Common Law Division where I sit, for example, in some lists it was routine for applicants to appear before the court audio visually. For over a decade nearly all applicants for bail, who were generally already in prison on remand, appeared audio visually. Likewise in the Court of Criminal Appeal, appellants in custody also usually accessed the court audio visually.

93 In both civil and criminal trials it was commonplace for witnesses, including experts who give their evidence concurrently, to come before the Court for cross examination either by audio or audio-visually from around the world. Victims were also able to give their impact statements audio visually.

94 In criminal trials legislation also required that some witnesses give their evidence remotely, such as children in Commonwealth sexual offence proceedings.[xxiii] Legislation of that kind had also led to standard directions given to juries, that the use of CCTV in such cases is routine.

95 Still in some cases there were real problems driven by people not being able to have access to the technology which they needed. The digital divide for those who were on remand was a frequently encountered problem.[xxiv] Recently enhanced facilities in prisons will hopefully drive real improvements for them.

96 There were also often times when effectively, proceedings were being conducted virtually, with all participants accessing the court either by audio or audio visually. Urgent applications made after hours in the duty list where the parties were physically far from the Court, produced such cases.

97 Unless a particular hearing was closed, all of these hearings were conducted in open court, physically accessible to the press and the public, who were free to enter the Court building and observe any hearing, with no requirement other than a bow.

98 Overnight, when public health orders confined people to their homes throughout the State, the NSW Supreme Court moved its non- jury hearings, including judge alone criminal trials, online. Its virtual courts were accessible not only by the parties and their representatives, but also by the media and the public, with the result that usually no-one other than court staff was physically present in court with the judge.

99 I sat in one of these early civil trials, where the week before the hearing I had to list the matter online for directions, to inform the parties that it would be heard in the virtual court and to work through the logistics involved with them. That required consideration of the technology which the Court, the parties and witnesses would have to use, with some located in the country and others interstate.

100 Initially there were practical problems to be managed, given the level of demands being made on the Court's systems, which had not been designed for all that they were suddenly called on to support.

101 The parties and their representatives had to become adept at the new demands which appearing in the virtual court made of them and they had to be patient, as the system at times staggered to cope with the increasing demands being made of it. Witnesses had to accustom themselves to unexpectedly giving their evidence from far flung places, remote from the parties' representatives; judges and those appearing had to accustom themselves to a new mode of hearing; and there were challenges in ensuring that the transcripts were accurate and complete.

102 More recently I sat in a long trial in the Banco court with some witnesses cross examined in court and others giving their evidence remotely, with some

members of the media and public in court and some accessing the hearing virtually. Such hybrid hearings are now commonplace and will continue, given the time and costs savings they can achieve.

103 Both the Chief Justice and the Supreme Court's Executive Director and Principal Registrar, Chris D'Aeth, have described how the Court managed the challenges it faced.[xxv]

104 From 16 March 2020, within days of the public health orders which limited people's movements and gatherings, parties and their representatives were largely precluded from attending the Court and it had to suspend the hearing of new jury trials. Other hearings continued online and with upgrades in its technology, the Court was soon able to run virtual hearings in over 20 courtrooms simultaneously, using a system which had never been intended to be used for that purpose.

105 The Court had regard to the experiences of courts across the globe using remote and virtual alternatives to traditional hearings, shared on the newly established Remote Courts Worldwide website. It also liaised closely with other State courts and those across the country, at both administrative and judicial levels, as well as with professional bodies, constantly updating its Covid-19 procedures, as new challenges emerged.

106 Bathurst CJ explained the challenges of this transition in an article published in the May 2020 NSW Law Society Journal, describing the technical problems which had to be overcome, how changes had to be implemented at a previously unimaginable speed and how reforms increased the flexibility and accessibility of the Court.[xxvi]

107 The result was that the NSW Supreme Court has been able to hear the majority of its civil matters as scheduled, with delays typically confined to cases with large numbers of parties, where considerable logistics have had to be managed. Even cases of that kind are now routinely being heard at allocated times.

108 The President of the Court of Appeal Justice Bell wrote in the Bar News dedicated to Covid-19 experiences, that it was a matter of pride that the Court has been able to continue sitting uninterrupted, hearing all 130 appeals scheduled, with none vacated and appeals, applications for leave and judicial review continuing to be listed. 142 judgements were also delivered between 1 March and 6 October. The Court of Criminal Appeal in fact increased its sittings and delivered 170 judgments in that time.[xxvii]

109 Bell P there spoke positively about the esprit de corps among the judges and the collegiality of members of the profession, which have been essential underpinnings of these successes.

110 As I wrote this lecture the Supreme Court's physical hearings had resumed in part, with ongoing social distancing permitting public access again to those hearings. Most appeals continue to be heard virtually. Physical access to its registry remains limited. But even jury trials are now being conducted using technology to a much greater extent than previously, to minimise the need for travel to court and contact between people.

111 The Court also expects to continue developing a standard model for technology upgrades, in order to achieve a level of consistency across all courtrooms it uses and that both virtual courts and hybrid hearings will continue.

112 The picture in the District Court of NSW is equally remarkable. It is the biggest jury trial court in the southern hemisphere and like the Supreme Court was forced to suspend new jury trials in March. With the co-operation of judges, the legal profession, witnesses and jurors, running trials continued, with some able to get to verdict and new jury trials resuming from 15 June.

113 That was the result not only of system enhancement in courts across the State, with years of planned work completed in months, but physical alterations to buildings; Covid practices and an essential worker protocol agreed with the Department of Health, to ensure juror safety and comfort;

where facilities were insufficient, space being leased in church halls, clubs and office buildings to permit safe empanelment; as well as new empanelment processes using AVL systems, all to ensure the safety of all those in court.

114 The Chief Judge, Justice Price considers that the Court has had better juror support since the pandemic than before, which may in part be explained by the $140 daily payment being tax free and on top of payments like job keeper and job seeker. Overall the Court has experienced great support and co-operation and little complaint.

115 Prisoners are also no longer brought to court for legal arguments or sentencing hearings, that being possible because of AVL enhancement in prisons and necessary, because of the ongoing requirement for prisoner quarantine after each court appearance.

116 The District Court is now at about 60% jury trial capacity, with the result that its pending criminal trial caseload has increased, but remarkably it now stands at only about 1500 cases, still much better than the 2000 cases pending 2 years ago. The position is even better with the Court's civil list. By largely remote sittings it has been able to dispose of almost as many matters during the pandemic, as in the same period in 2019.

117 AVL hearings have been so successful in the District Court that they will continue as much as possible for civil cases where cross examination on issues of credit is not required, as will the hearing of short matters and motions. In the criminal jurisdiction arraignment lists will also continue by AVL and readiness hearings which moved online, will also continue to be dealt with remotely.

118 The Chief Magistrate, Judge Henson decided that unlike other courts, the Local Court could not entirely close its doors to the public, needing as it did to continue dealing with domestic and personal violence, for example. Defended hearings did pause in March 2020, apart for those already in custody who

appeared by AVL. But it is expected that this month, both civil and criminal defended hearings will be back to normal.

119 A feared large upswing in domestic violence did not eventuate. There were even decreases in certain charges, as well as a decrease in the numbers of defended cases. But there was a considerable increase in applications for release on bail, some 2,300 for Covid related reasons, although the result of measures taken by Corrective Services NSW has been that there have still been no virus cases in custody.

120 Typically at the end of a month the Local Court has some 60,000 cases pending. That peaked at 94,000, at a time when there were many adjournments, when litigants did not appear.

121 Those numbers decreased as the result of innovations, such as police obtaining mobile phone numbers and email addresses on charge, that improving the Court's ability to communicate with litigants. AVL hearings, already significant at some 80,000 per year, even though only 90 of the Court's 158 courtrooms have AVL capacity, skyrocketed. In some lists email appearances were introduced, which now account for 30% of appearances in those lists.

122 These successful innovations will also be continued.

123 There have certainly been cases where it was concluded that unfairness would result from the strictures which the virtual court regime imposes and adjournments granted until they could be heard physically.[xxviii] In *Haiye Developments* [xxix] it was the challenge of assessing credibility in a case which turned on oral conversations, where the evidence had to be given with the assistance of interpreters, which led Robb J to conclude it would be unjust to require the case to be heard in the virtual court.

124 Similar challenges have been dealt with in other courts. In July 2020 in *Rooney v AGL Energy Limited* [xxx] Snaden J discussed his views and

experiences and those of other Federal Court judges when sitting in the virtual court, in cases where assessment of the witnesses was paramount.

125 His Honour noted that some judges had the view that such assessments can be made as well remotely as by traditional in-court examination and that he considered that it was "a good and, in many instances, necessary "Plan B".[xxxi] Snaden J considered that the technology could not fully replicate the court room environment and that it "inhibits (if not prohibits) the cadence and chemistry-both as between bar and bench, and bar and witness box - that personify well-run causes"[xxxii] The technology can also beget delay and, while "broadly reliable, it is not uncommon for connections to be momentarily of poor quality, occasionally to the point that they are unusable."[xxxiii]

126 His Honour also considered that when witnesses gave their evidence in court "the truth is less easily spun", important when "the outcome of the cause turns upon contested facts and the credit of those who recount them."[xxxiv]

127 Perram J had earlier taken a different view in April 2020 in *Capic*,[xxxv] where it was contemplated that 50 witnesses would have to give evidence. His Honour there examined many of the potential problems facing the preparation and conduct of a complex trial in a virtual court, including poor internet connections and other possible technological limitations, such as access to hardware and software; frozen screens and lines which drop out; lawyers and experts having to confer virtually; problems with electronic document sharing; having to confer during the actual hearing using apps such as WhatsApp; the possibility of undetected witness coaching; document management in the court book; and increased expense resulting from a virtual hearing.

128 Interestingly Perram J also explained the benefit of seeing cross-examination on platforms such as Microsoft Teams, Zoom or WebEx. His impression of those platforms was "that I am staring at the witness from about one metre away and my perception of the witness' facial expressions is much greater than it is in Court. What is different—and significant—is that the video-link technology tends to reduce the chemistry which may develop between

counsel and the witness. This is allied with the general sense that there has been a reduction in formality in the proceedings. This is certainly so and is undesirable. To those problems may be added the difficulties that can arise when dealing with objections." [xxxvi]

129 Still his Honour concluded that the trial had to be attempted, balancing the likely delay until the trial could be heard in open court.

130 For myself I have found that so long as there is sufficient bandwidth and everyone has access to reliable technology, online hearings are not problematic, even when credibility issues have to be dealt with. There has now been a great deal of experience in the management of problems when they do arise and over the course of this year there have already been many improvements. Appellate consideration of whether the result has been that trials have been unfair does not seem yet to have eventuated. Perhaps that is to come.

131 There have also been unlooked for advantages, in the delivery of open justice for example.

132 One good example of this was when the June 2020 Black Lives matter protests in Sydney were triggered by the police shooting death of George Floyd in Minneapolis in May, which had here reignited public concern about the earlier death in custody of David Dungay, an Indigenous Australian. When the proposed Saturday public protest first came before the NSW Supreme Court it was not physically accessible by the public, but the Court live streamed the hearing on YouTube. The result was that at 8 pm on the Friday evening, over 1,800 people were able to see both the arguments advanced and the judgment given.[xxxvii] This was unprecedented. Similar access was able to be given during the hearing of the appeal the next day, when one party's legal team was in Dubbo.[xxxviii]

133 Another innovation was the Supreme Court's Admission ceremonies which resumed online in August, with Bathurst CJ then marvelling as the ceremony

was livestreamed, that he had unexpectedly become a Vlogger: August 2020 Admission of Lawyers speech.[xxxix]

134 Innovations such as these will inevitably persist. That is because these changes have had advantages for costs, scheduling and access to the courts, particularly for remote parties and those who represent them, as well as the public.

135 The statistics show that they have allowed over a million people to access the courts virtually since these changes began to be implemented and that currently, there is a capacity for 700 concurrent participants in court proceedings.

136 These advantages and disadvantages are receiving widespread attention. For example in an online conference series in September and October, judges, practitioners, academics and various experts came together to consider a range of issues. They included not only the advantages and disadvantages of what has occurred for litigants and practitioners, but other important things like the sociological and neurological impacts of online courts; security issues; the impact on the community; whether best protocols have been adopted; and whether a return to past practices is feasible or desirable.[xl]

137 The COVID-19 *Legislation Amendment (Emergency Measures) Act* [xli] which facilitated greater use of such technology in criminal trials and enhanced technology in prisons, seems to have resulted in improved access to legal representatives in some places and less in others. But there have been concerns amongst public defenders and practitioners about the practical defendants who are remote from their legal representatives.[xlii]

138 This pivot was remarkable

139 But our courts are certainly not unique in what was undertaken, or in reviewing what has been achieved. In the UK, for example, the House of

Commons Justice Committee issued a report in July[xliii]. While significant achievements are there discussed, so are challenges, including the need for rigorous examination and making public data on what is happening in courts and tribunals day to day. Like here the biggest impact was on the criminal justice system, while some civil jurisdictions were able to operate close to normal, using remote hearings. There was also a real concern about the digital divide and vulnerable court users, increasing case backlogs and concerns about how the public could attend hearings.

140 I feel that in NSW at least, we have fared well by comparison.

Opportunities and risks of technological advances in an unknown future

141 The technology which courts were using provided tools which were made fit for the purpose to which they were unexpectedly put, although there have been obstacles and ongoing challenges. Appellate consideration may have an impact on the continued use, future development and adoption of such technology, as may ongoing reviews.

142 Much thought is being given to what more can be achieved to assist the courts better meet the duties I earlier discussed here and internationally, as the recent Commonwealth Secretariat 'The Rule of Law' webinar series exemplifies.

143 How to ensure that the legal profession is equipped to work with those who are developing the technology which will be used by and in the courts, is also being given real thought. As is technology which will help litigants.

144 AI, machine learning programs and apps are already utilised for things like writing wills and contracts; legal analysis and research; and automation of tasks like due diligence. The value of apps which seek to give litigants answers to their questions based on previous cases and help them to frame pleadings, submissions and so on, has long been apparent, but has now been given real impetus.

145 There are international experiences which throw light on the path ahead. Systems like the Canadian Online Civil Resolution Tribunal, for example. It deals with small claims with systems capable of asking users questions; providing free legal information and resources like letter templates, to assist users to resolve their disputes; if this fails, to provide dispute resolution through an online negotiation platform, which can help negotiate a result; or mediate the dispute; with agreements being turned into enforceable orders. Or finally, having the dispute determined by a tribunal member.

146 Such innovations all have obvious attractions, will continue to grow and will come before the courts for consideration.

147 But further innovation will have to unfold in a context where even before the pandemic struck; it had become apparent that insufficient thought may be given by those who drive technological developments, brilliant though they may undoubtedly be, to the legal considerations necessary to take into account, when development decisions are being made.

148 Developers and those who engage them will have to be conscious not only of the successes and failures of what has been attempted and achieved over the past challenging months. The consequences of past embraces of technology which we well know at times has overpromised and under delivered, both in court systems and elsewhere in our society, must also be borne in mind.

149 This can be well demonstrated by what became known as the Robodebt scandal. The extent of this debacle was revealed in a Senate inquiry into an initiative by the Department of Human Services, which had removed human oversight of an automated debt recovery system. The result was that at one point the system was automatically issuing approximately 20,000 letters a week to welfare recipients, demanding repayment of what the system had determined were overpayments of welfare benefits. As the Government eventually accepted, much of what had been so demanded was not actually owed at all.[xliv]

150 The Senate looked at the inadequate transparency of the AI methods which had been used in this scheme; the unintelligible reasons given for decisions made; design barriers which prevented people affected having speedy access to proper review of decisions which affected them; and other problems for the law which resulted from the use of the AI and the machine learning which the scheme had utilised. They included shifting the onus of proof to individuals who were ill equipped to meet that onus.

151 Proceedings were eventually brought in the Federal Court about these repayment demands. It was later revealed that it was advice about the illegality of the scheme, given by the Australian Tax Office's general counsel, which had finally led to it being suspended. This resulted not only in Government concessions in the Federal Court that the scheme was unlawful, but the making of consent orders, largescale repayments and a rare apology from the Prime Minster to those affected, for what had so been done.

152 How this all came about may yet come to be considered by the Federal Court in a class action. But what has been revealed so far underscores how much better it would have been if adequate consideration had been given to the legality of what the data sets and algorithms used in this system produced, when this flawed system was designed. Or at least before the flawed results which the system produced were implemented without human oversight, to the considerable detriment of the vulnerable welfare recipients affected.

153 It is mistakes like this which raise obvious questions for society and our courts about the use of future technological advances in our legal systems at a systemic level, as well as the use which is sought to be made of them in particular cases.

154 There is no doubt that such advances will be intriguing. We all want to help improve fundamental aims such as providing equal access to justice for all; transparency and the efficiency of our legal systems and most fundamentally, their delivery of timely, affordable justice to all litigants, in every case.

155 But there are already also international experiences which highlight the potential pitfalls ahead. In 2014, then U.S. Attorney General Eric Holder warned that computerised programs which resulted in risk scores used to predict the likelihood of future offending and so widely utilised on sentencing, parole and assessment of rehabilitation needs, might be injecting bias into the courts. He called for a U.S. Sentencing Commission study, which did not occur.

156 In 2016 Pro Publica took up the investigation. The result? The conclusion that rather than reducing bias, these programs were entrenching it.[xlv] Demonstrating yet again with such technology, that much always depends on the data which is used.

157 In Australia's courts, it will always have to be remembered that any technological advance will be utilised in a particular and very different context to that in which such technology may be used in other legal systems, let alone in commercial or even public sector spheres.

158 This is because our Constitutional system entitles members of our society to access our courts, not as part of their delivery of a mere dispute resolution system or some other type of public service, but in order that the litigants can exercise their fundamental right to access justice and the exercise of the State's judicial power, by a judge of the Court.

159 There will be other important considerations, not the least of them the risks for all users of digital and cyber technology, which are already well known.

160 The dark web, cyber fraud, malware and viruses, hacking and ransomware attacks explain why since 2016 Australia has had a federal Cyber Security Minister; since 2018 a National Data Breach scheme; since August 2020 Australia's Cyber Security Strategy; our universities teach not only how to deliver the promises of developing technology, but also about their risks and how to deal with them; and there is ongoing agitation for a tort of cyber harm,

in addition to how the Criminal Code (Cth) already deals with online offenders.[xlvi]

161 For courts these risks are also significant.

162 In the past there was no real risk of external interference with court files or judgments when they were kept offline, which could not be managed by courts' well developed and implemented physical security measures. But that world is gone into the cloud where data, including that of courts, may be stored under commercial arrangements with corporations who may not be Australia based and so beyond easy regulation.

163 Thus real cyber security risks, as well as the long understood physical ones, now both have to be managed.

164 Even before the pandemic, worldwide attention was being paid to the need to begin regulating the online world, to deal with the unanticipated consequences which technology had brought, as well as the enormous economic and social power which corporate players in that sphere now exercise worldwide, in e-commerce and other spheres.

165 The pandemic may have only increased the reach and revenue of technology companies like Facebook, Google, Alibaba, Microsoft, Apple and Huawei and the myriad of others who are involved in the development and delivery of technological advances which will be utilised in our courts and legal systems.

166 The media has recently been full of discussion of international competition and the security and other concerns it drives, which have resulted in things like the US moving to force the sale of the US operations of the TikTok app, with China then moving to impose export controls on some of its companies' technologies, in fields including AI, robotics and quantum computing.[xlvii]

167 In Australia consideration has been given to a mandatory code of conduct, forcing social media companies to share revenue with traditional media

companies, when republishing their content. The alternatives, abandoning regulation, a threat by the platforms that they would ban all local news content, or a general tax on digital transactions. Digital services taxes on tech corporations considered not to be making a proper contribution to the common good seems to be a matter of international concern.[xlviii]

168 Concerns about the adequacy of the regulation of global corporate titans in Australia and internationally generally appears to be driven by questions around abuse of market power and not acting as good global or local citizens. They have been driven by experiences such as that of New Zealand in 2019, when an Australian terrorist was able to broadcast unhindered on Facebook, the murderous rampage in which he killed 51 defenceless people.

169 Technological advances are not always a force for social good. Thus concerns about unhindered abusive online trolling also drives calls for better regulation.

170 Concerns about things of this kind appear to have had no direct impact to this point on our courts, although disputes about them are likely to arise in proceedings yet to be litigated. But given courts' uses of current and emerging technologies, any capacity to adversely impact court operations in ways we have not foreseen, must always be guarded against.

What about Artificial intelligence?

171 Artificial intelligence which has the capacity to do all that Australia's Constitution requires its courts and judges to do, does seem to be a very long way away, if ever possible at all.

172 This, after all, raises questions about human capacity to do the godlike: create systems which have human like intelligence, not just inhuman computation capacity. Perhaps even what in humans accompanies and drives the use which we make of our intelligence, the conscience, that being even now a relatively little understood condition, which we know exists only because we all share it.

173 There are already systems in places such as Singapore and China, which use machine learning to assist judges, in analysing issues for example. But the burning question remains, even if we could consider using AI systems to replace human decision makers, should we?

174 Like anything else, if AI systems were to be utilised in decision making, they would need to be quality systems, which would make neither unthinking mistakes, nor mistakes driven by deficiencies in data. Such systems would not only have to have intelligence, but the machine equivalent of the life experience and maturity we expect human decision makers to have, before they are given the power to make important decisions which affect others.

175 There also has to be scope for ongoing oversight. Would ordinary appellate processes be sufficient? They might be too slow.

176 When the pandemic struck stock markets went into free-fall and it was found that sophisticated computerised trading models, which depend on incredible amounts of data to manage billions of dollars of investments, could not cope with the unanticipated consequences of lockdowns. Override functions then had to be used by humans, in order to deal with what was obvious to them. Namely, that there would be negative impacts on sectors like travel and education, which the models did not recognise, given the data sets which they were designed to use.[xlix]

177 Problems like this explain why in April 2019, Bathurst CJ[l] favoured a slow and deliberate response to innovation by our courts, given that our legal system forms the bedrock of our society. He then urged the legal profession to help the experts developing new systems to understand the law and our legal system, because they can appear to be arcane and obscure to non-lawyers.

178 The Chief welcomed legal innovation, but also warned of the need to ensure that it does not compromise the fundamental values and principles which underpin our legal system, the characteristics of our courts and lawyers' compliance with their professional obligations.

179 The Chief Justice of the Federal Court, Allsop CJ, also discussed some of these issues in March 2019.[li] His Honour then discussed the improvements technology had brought in the running of Australia's courts; how cost still made some innovations ineffective; and the new security issues which had arisen, which were not a consideration in cases conducted in more traditional ways, where there is no risk of hacking.

180 Of course all of our courts, their chief justices, judges, administrators and those who support their operations learned in 2020 that change can be forced and become reality much more quickly than was ever before dreamt of. But the need for caution which the Chief Justices spoke about in 2019, is a need which continues.

181 Professor Richard Susskind, a well-known scholar in the field of law and technology, adviser to numerous bodies including the Lord Chief Justice of England and Wales and a speaker at Australian and international seminars on courts' responses to the pandemic, published his book Online Courts and the Future of Justice in December 2019.[lii]

182 From what Professor Susskind has more recently said he was not anticipating leaps of the kind which Australian and other courts have made, when he wrote this book. While he contends there is yet a long way to go before humanity has the universal access to intelligible justice for which he contends, there are still practical problems which have to be confronted and what he dreams of perhaps unachievable.

183 One ongoing challenge is the need for reliable data, on which any system utilising machine learning depends.

184 For example, the NSW Judicial Commission's Judicial Information Research System is an obvious source of reliable data about sentences imposed in cases decided since it was created. But even reliable data about past decisions does not alone provide a proper basis for arriving at a decision in any particular future case.

185 In sentencing that is because even when maximum penalties for an offence do not alter, sentencing practices for the offence may have to change over time, in order to reflect changes in community attitudes. Thus, in 2016 for example, the High Court recognised in *R v Kilic* that "current sentencing practices with respect to sexual offences may be seen to depart from past practices by reason, inter alia, of changes in understanding of the long-term harm done to the victim.[liii]

186 This was a reflection of how human understanding of things important to sentencing does change over time, both with greater experience and scientific advances. Such understanding is something which algorithms and data sets may not easily replicate.

187 Also, just because past sentencing practices can be discerned, that does not mean that they are either correct, or ought to be followed in future. Our system of justice and its judges have the capacity to recognise past errors and to ensure that they are not repeated. Any effective AI system will also need to have such a capacity.

188 In *Director of Public Prosecutions v Dalgliesh* [liv] it was thus concluded that sentences in comparable cases could not justly govern current sentencing practices. That conclusion was driven by a review of past decisions, beginning with a 1986 case where an appeal was upheld against a sentence of 6 years' imprisonment, with a 4 year non-parole period for conviction of one count of incest with the offender's 14-year-old stepdaughter, who he had forcibly penetrated despite her screams and struggles. The sentence was reduced to only 4 and a half years, with a non-parole period of 3.[lv]

189 The plurality there considered that it was "difficult to imagine that a sentence of less than six years' imprisonment could have been regarded as a just sentence in those circumstances even at that time. It invites the observation that the circumstance that the victim was the stepdaughter of the offender seems to have been treated, anomalously, as a matter in mitigation, rather than aggravation, of the offending" [lvi].

190 That was a conclusion which the High Court concluded our society could not now tolerate. The result was that sentencing practices for this offence had to alter, despite what had been decided in the past.

191 It is difficult to see that any decision making system which depends on data provided by past cases, no matter how good the algorithms which utilise that data are, will be capable of such reflection or correction.

192 As the High Court also explained in *Dalgleish* the administration of Australia's criminal law requires individualised justice to be delivered in every case.[lvii]

193 Thus the imposition of a sentence in a particular case requires the exercise of judicial discretion as part of a system which seeks to be systemically fair. Such fairness is the result of consistency in the application of the relevant legal principles, which must be applied to the facts of the particular case, by a process of "instinctive synthesis".*[lviii]*

194 That process requires the judge to identify all of the relevant factors in the particular case, to discuss their significance and to make a "value judgment" as to the appropriate sentence, given all of those factors.[lix] An effective AI system will also have to have the capacity to undertake this synthesis. That may also be remote.

195 In the civil sphere, by way of comparison, other considerations which require human experience, also often arise to be considered. It is not unusual, for example, for Australian legislation to require courts to have regard to "unconscionable conduct", which has to be considered by reference to societal norms or community standards.[lx] These will, of course, also change over time.

196 It can be difficult for humans to identify what community standards are at the time a difficult decision must be made. That is certainly something about which reasonable minds can differ. It is hard to imagine the data set or algorithm which will not only be able to capture all the data which necessarily

underpins a human being's conclusions about such a concept, but is also able to arrive at a conclusion which humans will accept.

197 What all of this reflects is that one important aspect of the judicial task is the exercise of imagination. Another, an understanding of how our society alters over time and a third, that sometimes past error must be discerned and corrected.

198 The possibility of an artificial intelligence system being devised which has all of these necessary human attributes and capacities, able to undertake all required judicial tasks and then to explain the result in the transparent way discussed in *DL*, so that appeal rights can be exercised and an appellate court can undertake its functions, is also difficult to imagine.

199 These are not only Australian concerns. At common law the doctrine of stare decisis, adherence to precedent, does not always require unthinking adherence to past decisions, particularly when they are considered to be wrong. Thus the US Supreme Court recently discussed in *Ramos v. Louisiana* [lxi] the US constitutional right in a criminal trial to conviction only by a unanimous jury, explaining how some of its past decisions had fallen into error and could no longer be followed.

200 This judgment was recently referred to in *Jamison v McClendon*[lxii] where Reeves J wrote an extraordinary analysis of the US Supreme Court's approach, over time, to the construction of the US Constitution and its guarantee of equality before the law and the common law doctrine of qualified immunity.

201 In the US that doctrine protects law enforcement officers from the consequences of their wrongdoing, in certain circumstances. Reeves J contended that in real life, the Supreme Court's approach has wrongly come to provide absolute immunity for police officers, given its construction of a federal law which imposed liability on such officers when they injured someone, while depriving them of any of the "rights, privileges, or immunities

secured by the Constitution". Reeves J urged the view that this approach must also be revisited.

202 Given what generated the Black Lives matter movement in the US, the killing of an unarmed black man by police officers in an encounter captured on video by bystanders using their smart phones, while he desperately pleaded that he could not breath, a vehicle for such a reconsideration of police officer's immunity seems quite likely to come before its Supreme Court.

203 These are but a few recent examples of judicial consideration of past decisions, their correctness and their ongoing place in law, given the needs and concerns of current human society.

204 Machine learning and AI which necessarily depends on what has happened in the past may not only be ill equipped, but actually incapable of such reconsideration of what human society requires as beliefs change over time, as they always do.

205 But being a science fiction enthusiast since childhood, I am willing to embrace the possibility that science, galloping ahead as it is at an ever increasing pace, with the understanding that its voyage through concepts like quantum mechanics, physics and entanglement, Bell's theorem, nanotechnology and other marvels we have not yet dreamt of will bring, will develop an AI system capable of such decision making.

206 What the creator of such an AI system will have to bear in mind if replacement of human judges is the goal, is the humanity of our legal systems. Systems which are not concerned only or even principally with questions of cost and efficiency, but with the delivery of justice by exercise of the State's judicial powers, to the human beings who appear before them, in every case.

207 We know that what is just is something about which reasonable minds can also differ. Accordingly such AI systems, like human minds, will have to not only be provided with information about a dispute, whether legal or factual and

the applicable laws and relevant case law and the capacity to arrive at a result, It will also have to be equipped with humanlike emotions and experience of the kind which judges bring to bear when undertaking the required synthesis.

208 That will be necessary in order to drive an understanding of human behaviour and the consequences of the potential decisions which are available to be made on human beings, all things which judges now must bring to bear in arriving at a decision. Such systems will also have to be able to take into account that their decisions may not only affect the humans who are the direct parties to the litigation, but in many cases, society as a whole, when formulating the order to be made and the reasons given for the decision.

209 All of that being so, any AI system used to make decisions in our legal systems will also have to command the confidence which Australian society presently has in our courts and their judges. What that will depend on is not only demonstrated capacity to make human like decisions, but also human satisfaction that this capacity actually exists. Without such prior confidence no AI system is likely to be permitted to function as a part of Australia's legal system.

210 How such confidence could be developed, seems also to present a significant challenge.

211 It is at this point that what Sir Ninian examined in his speech becomes important.

212 I have discussed the limits on parliamentary powers entrenched in the Constitution, in relation to our courts' exercise of the State's judicial powers.

213 Those constraints are the result of the democratic processes by which the Constitution was created, which Sir Ninian discussed. In short it was the product of the Federation movement, a people's movement driven forward in the 1890's, which in 1891 produced the first agreed draft constitution, by a

process involving representatives of the six Australian colonies and New Zealand, who had been appointed by their parliaments and met together in conference.

214 The 1893 Corowa convention was attended by delegates from NSW and Victoria who were not selected by Parliaments, but by other bodies including the Australian Natives' Federation, the Trades Hall Melbourne, the Chamber of Manufacturers and various leagues which were promoting the concept of federation. This convention adopted a resolution that the Colonial legislatures should pass an Act providing for the election of representatives to attend a statutory convention to consider and adopt a Bill to establish a federal Constitution for Australia, which would be submitted to the electors of each Colony for verdict by referendum.

215 In 1895 and 1896 the Colonial parliaments of NSW, South Australia, Tasmania and Victoria enacted the enabling bills which provided for representatives to the next Convention to be elected and for the proposed Constitution finally to be considered in a referendum.

216 The Bill which resulted from this process was finally enacted by the United Kingdom Parliament, providing for a system of constitutional amendment by referendum which was modelled on the Swiss, rather than American Constitution, which to its detriment provides for amendment by constitutional convention without popular vote.

217 Australia's Constitution, however, requires even more than a popular vote. Namely, the passing of a bill by Parliament; then submission of a referendum to the voters in both the States and Territories; and then ratification by 'double majority', that is a majority of voters saying yes in at least 4 of our 6 States, as well as a majority of all those who voted.[lxiii]

218 Over time this democratic constitutional model has revealed both the innate fairness and caution of the Australian people about the amendment of its Constitution, with which they seem largely content.

219 Of 44 referenda, only 8 have resulted in Constitutional amendments. They included of course the 1967 amendment to s51 (xxvi) and the removal of s127, which denied the Commonwealth the power to enact special legislation for Aboriginal people in the States, or to include them in a national census. The referenda that failed included the 1999 referendum for the establishment of Australia as a republic.

220 There are certainly those amongst us who look forward to the time when it will not be fallible human beings alone who can make intelligent decisions for humanity. But if this capacity eventuates, introducing an AI decision maker into any of our courts will require Constitutional amendment, given that AI systems are not something which is there contemplated, or provided for.

221 Given the Constitutional requirements that there not only always be a High Court, but also State Supreme Courts whose judges exercise the judicial power of the State; the Constitutional mechanism provided for its amendment; and Australian's innate caution about Constitutional change, it seems to me that Australia is unlikely to abandon its judges in favour of AI systems.

222 That would first require convincing innately cautious and fair Australians, that such an AI system is not only lawful, but would not risk Robodebt type, or even worse failures. Even AI systems designed to assist judges in undertaking their judicial tasks are likely to be approached with caution.

223 If ever we put our toes into that water, what we would be risking would also appear always to demand that there be real, ongoing human oversight of such systems.

224 High hurdles indeed.

The unknown future

225 The future is unfolding fast, as it always does and the pace of technological advancement is ever increasing.

226 The challenges continuing to face Australia and its courts even after the pandemic ends will not only remain large, but unpredictable. Opportunities for our society's continued advancement are also very great, supported as that is by courts which are willing to continue embracing useful innovations, in advancing the rule of law.

227 We have the proven capacity to continue learning from our experiences, both good and bad. Given our experiences to this point, we are likely always to be careful about ensuring that any technological advances which we consider embracing are lawful. Amongst those considerations will always be whether they are constitutionally permissible.

228 Even with fully functioning AI systems that may prove to be a real, practical limit on the extent of change which innovators and tech enthusiasts are able to drive in our courts and legal systems.

229 Given Australia's democratic Constitution, ultimately what is permitted will depend on the collective wisdom of the Australian people.

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[i] Sir Stephen Ninian, "Our Democratic Constitution", On the occasion of the First Sir Ninian Stephen lecture at the Faculty of Law, the University of Newcastle, Newcastle, New South Wales (10 March 1993).
[ii] Macquarie Online Dictionary.
[iii] Ross Gittins, *Pandemic: Inconvenience for the privileged, tough luck for the poor*, Sydney Morning Herald (2 September 2020).
[iv] *s23 of the Supreme Court Act 1970 (NSW)*
[v] *Supreme Court Act 1970* (NSW) s23.
[vi] *Privy Council (Appeals from the High Court) Act 1975* (Cth).
[vii] *Re Minister for Immigration and Multicultural Affairs* [2003] HCA 30 at [8]-[9].
[viii] *Court Suppression and Non-publication Orders Act 2010* (NSW).
[ix] *Rinehart v Welker* 93 NSWLR 311;[2011] NSWCA 403; (2011).
[x] *DL v The Queen* [2018] HCA 26 at [32]; (2018) 266 CLR 1
[xi] *Wainohu v New South Wales* (2011) 243 CLR 181; [2011] HCA 24 at [56]-[58].
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