LAW SCHOOL 2061[Ψ]

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Roger Brownsword, **Law, Technology and Society**, London: Routledge, 2019, 351 pp, pb £34.95 and *Roger Brownsword*, **Law 3.0**, London: Routledge, 2021, 130 pp, pb £16.99

The comic books of my youth were remarkably bad at forecasting the future. While the non-dystopian books envisaged that, by this point in history, the majority of us would be living on other planets, with the children who remained on earth piloting themselves to school in their own personal helicopters, the dystopian ones foresaw humanity enmired in various catastrophes, one of which culminated in the rise of earthly Mega-Cities policed by Street Judges.[1] None of these things has yet come to pass. What about other, possibly more momentous but also more prosaic prophesies, such as those about the future of law, legal practice and legal education? Are claims that real court buildings will be unnecessary, that algorithms will replace judges, and that law will 'drive itself' any more likely to be accurate than those of my childhood comic books?[2] That lawyers are in a position to assess such claims is principally the result of the work of jurists like Roger Brownsword. Brownsword is our leading and most interesting jurist of technological management and can be placed, alongside other legal futurologists like Marielle Hildebrandt and Richard Susskind,[3] at the informed and pragmatic end of the futurology spectrum: their claims about our legal future are rooted in a deep understanding of our legal past and present rather than the product of either utopian

[Ψ] My title derives from R. Brownsword, 'In the Year 2061: From Law to Technological Management' (2015) 7 *Law, Innovation and Technology* 1-51.

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[1] As related in the Judge Dredd strip from the comic book *2000 AD*.

[2] On the likely redundancy of court buildings, see R. Susskind, *Online Courts and the Future of Justice* (Oxford: Oxford UP, 2019); for robo-judges, see J. Morison and A. Harkens, 'Re-engineering Justice? Robot judges, computerised courts and (semi) automated legal decision-making' (2019) 39 *Legal Studies* 618-635; A. J. Casey and A. Niblett develop the idea that law will soon 'drive itself' in 'Self Driving Laws' (2016) 66 *UTLJ* 429-442.

[3] See M. Hildebrandt, *Smart Technologies and the End(s) of Law* (Cheltenham: Edward Elgar, 2015) and Susskind, *ibid.* For a broad overview of the field, see R. Brownsword, E. Scotford and K. Yeung, *The Oxford Handbook of Law, Regulation and Technology* (Oxford: Clarendon, 2017).

or dystopian speculation. What, then, does Brownsword's expert and pragmatic legal futurology say about the legal future? That it is already here.

THE FUTURE IS NOW

Law 3.0[4] begins with a reminder of recent history, focussing upon the closure of Gatwick Airport in 2018 because drones were sighted near the airport perimeter. The media and related discussion of this episode illustrated, says Brownsword, the essentials of three different but clearly related ways of thinking about social problems and their solutions. One approach to a particular social problem or body of such problems is to create a set of general rules which, for all but the most elementary problems, will contain prohibitions, duties and powers among other normative modalities and will be accompanied by both enforcement mechanisms, on the one hand, and penalties (or related costs) for non-compliance, on the other. There were, at the time, some pertinent legal rules of this kind, including those which set exclusion zones around airfields and prohibited the flying of drones within them. That prohibition was 'normative' in a double sense: the rule specified what ought not to be done but, like most (or all?) norms, it also allowed the possibility of non-compliance. The latter, combined with apparent acts of non-compliance, was the source of the problem.[5]

As a way of responding to social problems, this approach – which Brownsword has variously dubbed "Law 1.0" or "rule-regulation" or an "East coast" regulatory response[6] – seems both lax and indirect. The laxity arises by virtue of the space allowed to addressees not to comply and to run the risk of incurring penalties as a result. Even in the face of a 100% effective enforcement regime, the problem that we have set ourselves to solve can still occur and, as enforcement regimes become less effective, so the space expands in which the problem can recur. The 'indirection' arises from the same source, for Law 1.0 always attempts to engage the agents whose conduct causes the harm or the problem, wanting to affect their practical reasoning in such a way as to make problem causing conduct the least salient option

[4] Hereinafter, in both text and notes, '*3.0*' with accompanying page numbers. I henceforth use the term 'Law 3.0' to mean not Brownsword's book, but (i) the regulatory context in which he thinks law currently exists (or soon will) and (ii) the way law should be envisaged there.

[5] The drone or drones were observed by witnesses but there was no video or other recorded footage and some have expressed scepticism as to its or their existence: https://www.theguardian.com/uk-news/2020/dec/01/the-mystery-of-the-gatwick-drone (last accessed March 15th 2021).

[6] See R. Brownsword, 'Code, Control, and Choice: Why East is East and West is West' (2005) 25 *Legal Studies* 1-21; and his 'In the Year 2061 . . . ', above, note Ψ.

available. What other rationale could inform Law 1.0's commitment to the public declaration of rules and their associated enforcement and penalty regimes prior to the implementation and attempted enforcement of the rules?

Brownsword notes that, during the Gatwick disruption, representatives of the British Airline Pilots' Association told reporters that the legal regime controlling drone use near airfields required amendment. They thought that existing exclusion zones were not large enough and that the existing legal rules were insufficiently policed and enforced; the association's members had reported many dangerous close encounters with drones.[7] The government of the day responded by changing the law and conferring new police powers, recognising, along with the pilots' association, "that the existing rules were not fit for purpose" (*3.0*, 1). Responsiveness to purpose and the efficacy of particular or whole bodies of legal rules is a hallmark of Law 2.0 for Brownsword. A Law 2.0 way of thinking does not differ radically from the Law 1.0 mentality, since legal regulation on the former view still manifests the laxity and indirection characteristic of the latter. However, a Law 2.0 "conversation is not about the internal coherence or the application of general legal principles" (*3.0*, 21) but about their effectiveness. The key question in the Law 2.0 mindset is, therefore, this: are the legal principles and rules in play efficient means to the ends they are intended to achieve?

Another type of response to the disruption was also mooted: the exploration of technological means to ensure that the problem simply couldn't arise. This type of response could entail anything from the bluntest regulatory strategy (a ban on drones so effective as to prevent either their manufacture or importation or sale) to something more parsimonious (an engineering-cum-software geo-fencing 'fix' which prevents drones flying near airfields[8]). What responses of this type have in common is a reliance upon technology to solve the problem combined with an implicit preference that the best solution prevents the problem occurring: ideally, it is engineered out of existence. This type of response to social problems is, for Brownsword, a matter of '"technological management"' (*LTS*, 4).[9] It consists of

[7] A more recent iteration of the complaint (27th Jan 2020) is: https://www.balpa.org/Media-Centre/Press-Releases/New-study-shows-drone-presence-in-controlled-airsp (last accessed 15th March 2021).

[8] National Air Traffic Services (a public-private partnership) claimed on 22nd May 2019 that "most modern, high-end" drones now have this fix incorporated into their management software: https://nats.aero/blog/2019/05/how-the-gatwick-drone-incident-resulted-in-dozens-of-diversions/ (last accessed 16th March 2021).

[9] This reference, which I use throughout, is to Brownsword's *Law, Technology and Society*.

> "the use of technologies – typically the design of products or places, or the autonomation of processes – with a view to managing certain kinds of risk by excluding (i) the possibility of certain actions . . . or (ii) human agents who might otherwise be implicated (whether as rule breakers or as the innocent victims of rule-breaking) in the regulated activities" (*LTS*, *ibid*).

When the policy instrumentalism of Law 2.0 meets technological management we are, according to Brownsword, in the realm of Law 3.0. Law 3.0 consists of a "two pronged approach" to social problems, including a "rules fit for purpose" instrumentalism alongside the pursuit of "technological solutions . . . cover[ing] a broad range of measures that might supplement or supplant the rules" (*3.0*, 2). This way of thinking about law sees it as one item on the menu of regulatory options, its rule-based nature still informed by a Law 1.0 mentality. The other options on that menu display no bias in favour of rule-based regulation and, indeed, are now more likely to consist of various technological fixes. Furthermore, such fixes are likely to appear more effective than any Law 1.0 or 2.0 regulatory response, since the laxity and indirection inherent in them can be engineered out by technological management. Making problem causing conduct impossible seems a much better regulatory response than allowing it to occur, albeit with penalty and enforcement regimes attached.

Brownsword thinks that our current direction of regulatory travel, driven by the rapid development of ubiquitous computing, deep machine learning and artificial intelligence,[10] is toward ever more technological management. This marks a shift in our "regulatory register" (*LTS*, 107), from a context in which the regulatory 'pitch' resounds normatively and is therefore principally rule-based, to one which is non-normative and technology based (*LTS*, 106-107). The signals in our regulatory environment are shifting from statements about what regulatees should and should not do, on pain of sanctions specified in advance, to what they can and cannot do. Not for much longer will regulators exhort drivers to obey speed limits on pain of fines and other sanctions, when they can ensure, by various cheap and effective technological fixes, that cars simply cannot be driven beyond the speed limit.

While some lawyers might look on this diagnosis and fear for their professional future,[11] Brownsword sees a number of fascinating intellectual and moral challenges. The first

[10] A handy beginners guide to these developments is A. Greenfield, *Radical Technologies: The Design of Everyday Life* (London: Verso, 2017).

[11] See Morrison and Harkens, n 2 at 618-619 for an assessment of the likelihood of law jobs disappearing as a result of technological advances.

of these is simply for lawyers to appreciate the nature of their current and coming regulatory environment: "jurists should take an interest in the field not only of legal and non-legal norms but also of technologies that function as regulatory instruments" (*LTS*, 106). This mixed regulatory environment "encompass[es]… both normative and non-normative channelling strategies" (*LTS*, *ibid*) and, once we – lawyers and citizens – are aware of them, we are able to "track[..] the shift from reliance on the moral regulatory register to the prudential register, and then from normative to non-normative registers and strategies" (*LTS*, 107).

LAW SCHOOL 3.0

If *3.0* and *LTS* did no more than offer the diagnosis of our regulatory context noted above, then they would undoubtedly be successful and important books. But there is more. For, in addition, the books offer a fairly full sketch of the curriculum for Law Schools aware of their current regulatory predicament and the challenges it presents.[12] There are three such challenges, according to Brownsword, and a Law School that understands the nature of Law 3.0 will address each of them.

The first challenge undertaken in Law School 3.0 is that of broadening the minds of lawyers and regulators. This is not a matter of opening pragmatic and philistine legal minds to the joys of poetry, music, painting and the like, but rather of ensuring that they are aware of the broader social and global context of their quotidian regulatory endeavours. We have already noted one significant feature of the social context of Law 3.0, namely, that the regulatory environment is composed of both normative and non-normative tools. An awareness of both, by both lawyers and technologists, is vital according to Brownsword, since the Law 3.0 world is one in which regulatory problems are not rigidly categorised as falling into 'legal', technical and other distinct types, each category offering its own unique form of response. Law School 3.0 aims to produce smart regulators who see every aspect of the problem before them and are able to assess, without prejudgement, which strategy from a mixed menu of legal, technological and other responses is most likely to solve it in the best way. Graduates of Law School 3.0 are therefore trained to look both at the details of the specific regulatory problem and beyond, to the rich spectrum of possible responses and the broader regulatory milieu in which they exist.

[12] The sketch is implicit within chs 5-12 of *LTS* and is made explicit in ch 25 of *3.0*.

Students in Law School 3.0 are also reminded that that regulatory milieu is peopled by fellow human beings living with finite resources on a planet in need of stewardship. These parameters, taken in conjunction with other truisms about humankind – that they are capable of and value agency, for instance (*LTS*, 79-81) – set the limits within which the regulatory enterprise is conducted and generate, according to Brownsword, "three regulatory responsibilities" (*LTS*, 89) binding upon all regulators. The first is "to protect the global commons" (*LTS*, 107), these being "the essential conditions for human existence" (*LTS*, 91), "the generic conditions for the self-development of human agents" (*ibid*) and the "essential conditions for the development and practice of human agency" (*ibid*). The second is "to construct on the commons the kind of community that citizens distinctively value" (*LTS*, 107), while the third is "to undertake routine adjustments to the balance of competing and conflicting legitimate interests in the community" (*LTS*, *ibid*).

These responsibilities constrain all regulatory interventions, although the first is the most important (*LTS*, 89). It carries a range of significant implications, which Brownsword calls "regulatory red lines" (*LTS* 90), not the least of which is that it limits recourse to technological management. A defining characteristic of the latter as a regulatory option is the eschewal of human agency and that cannot be a default or generalised response of a regulator who values 'the essential conditions for the development and practice of human agency'. That is particularly so if agency is best conceived as a performance dependent upon the fairly frequent exercise of a range of capacities and, of course, judgement. Agency is therefore what Charles Taylor terms an exercise-concept.[13] Understood thus, it is exactly like its particular instances, such as playing the piano: something at which one can become better or worse and which requires practice. It needs space to flourish; automatic and frequent recourse to technological management will shrink that space.

The second challenge addressed in the Law School 3.0 curriculum is this: to address the impact non-normative regulation has upon some of the fundamental components – the rule of law, the idea of coherence and freedom – of the Law 1.0 legal imaginary.[14] Each of these ideas is most obviously at home in a context in which rule regulation is the principal mode of regulation. From the initial regulatory choice to subject human conduct to the

[13] C. Taylor, *Philosophy and the Human Sciences: Philosophical Papers 2* (Cambridge: Cambridge UP, 1985), 213.
[14] I'm (mis)appropriating Charles Taylor's broader notion of a 'social imaginary' to juristic purposes here: see his *Modern Social Imaginaries* (Durham: Duke UP, 2004), ch 2.

governance of rules, a number of commitments quickly follow: most obviously, a commitment to formulating and publicising general rules and, only slightly less obviously, a commitment to ensuring that those rules are coherent, stable, non-contradictory, non-retroactive and possible to comply with, for how could rules guide in the absence of these conditions? There must also be a commitment by regulators to abide by the promulgated rules since, if they frequently departed from them, the rules could not provide reliable guidance. These eight desiderata surely constitute the concept of the rule of law, the argumentative plateau upon which all ostensibly competing conceptions of the rule of law must be based, it being impossible to envisage an account of the rule of law deserving that name while eschewing any of the desiderata.[15]

Coherence is a rule of law desideratum and it informs – or is closely connected to – at least four others (generality, possibility, stability and non-contradictoriness). It is also a guiding ideal of the Law 1.0 mindset requiring, at its most general, "government to speak with one voice, to act in a principled and coherent manner toward all its citizens, to extend to everyone the substantive standards of justice and fairness it uses for some".[16] At the level of legal doctrine, it insists that the "multitudinous rules of a developed legal system should 'make sense' when taken together".[17] This ideal clearly includes but requires more than that bodies of legal rules be non-contradictory; it is a matter of being able to regard such rules as "more specific or 'concrete' manifestations" of more general normative principles or goals.[18] The coherence in play is that of a general normative scheme which is given effect by the particular rules of the system.

If we accept that law can conflict with liberty,[19] then those legal systems which display both a high level of coherence and a sincere commitment to the rule of law desiderata are ones in which realms of state coercion and freedom are relatively easily marked. Mandatory

[15] They belong to L. L. Fuller, *The Morality of Law* (New Haven: Yale UP rev. ed., 1969), ch II. For the argument that they constitute the concept of the rule of law, see my 'Access to Justice and the Rule of Law' (2020) 40 *Oxford Journal of Legal Studies* 377-403 at 384-389.

[16] R. Dworkin, *Law's Empire* (London: Fontana, 1986) 165.

[17] N. MacCormick, *Legal Reasoning and Legal Theory* (Oxford: Clarendon, rev. ed., 1994) 152; coherence, for MacCormick, stands alongside the narrower notion of consistency (or non-contradictoriness): see *ibid*, ch VIII.

[18] MacCormick, *ibid*, 152.

[19] We have to be something other than strong negative libertarians (those who think unfreedom is a matter of genuine impossibility) for this to be true: a classic of the credo is H. Steiner, 'Individual Liberty' (1974-75) 75 *Proceedings of the Aristotelian Society* 33-50. I use the terms freedom and liberty interchangeably in what follows, contrary to the lesson in H. F. Pitkin, 'Are Freedom and Liberty Twins?' (1988) 16 *Political Theory* 523-552.

legal rules, which prohibit or require certain conduct mark the core of the domain of coercion, insofar as those rules are enforced and backed up by sanctions. Facilitative legal rules confer powers, the exercise of which might be backed up by the coercive weight of the law, while various other legal rules might delineate various permissions, immunities and liabilities, all of which might at some point be protected or enforced by the law. The realm of freedom, on this view, which is again a core component of the Law 1.0 mindset, begins where the realm of law ends.

One might think that Law 3.0 presents no challenge to these three ideals, since they are simply redundant in a world of non-normative regulation. That form of technological management makes certain conduct impossible, engineering out the chance of non-compliance. Thus, when legal rules are replaced by technological management, the ideals of coherence, the rule of law and freedom lack purchase. But, of course, the Law 3.0 environment is not one in which rule regulation has disappeared. It is, as Brownsword reminds us, a regulatory world in which rule (or normative) regulation coexists with non-normative regulation. The old ideals are therefore still in play. Yet it is not just the fact that remnants of Law 1.0 thinking exist in the Law 3.0 world that explains the persistence of these ideals. Rather, Brownsword argues that their theatre of operations must be extended from the domain of rule regulation into that of technological management. The thrust of part two of *LTS* (chs 5, 6 and 7) is to show how these animating ideals of Law 1.0 can and should be expanded into a very different regulatory context, Brownsword being of the view that the values these ideals uphold are just as important in the Law 3.0 world as they were in the Law 1.0 world. He is surely right about that, but sufficiently aware of the challenges of the Law 3.0 world to realise that these ideals cannot operate within it in their exact Law 1.0 form:

> "[t]o carry forward the spirit of the Rule of Law and liberty, these ideals need to be reworked so that they engage fully with non-normative regulatory instruments. As for coherence, . . . we need make two adjustments. One . . . is to relate coherence to the full range of regulatory responsibilities . . . the other [being] to apply this check for coherence to all modes of regulation, . . . whether . . . public . . . or . . . private" (*LTS*, 178).

The third challenge that defines the Law School 3.0 curriculum is that of reinventing the canon, by which I mean the process of rethinking and rewriting the standard doctrinal categories and textbooks of the Law 1.0 world. In part three of *LTS*, Brownsword sketches the

ways in which tort, contract, criminal and privacy law must be refined in light of the technological advances that define Law 3.0. In some instances – tort law and privacy law – he shows that the doctrinal rules of the old legal regime can either be stretched so as to incorporate changes that have occurred in the new or can stand "alongside technological measures that contribute to the desired regulatory effect" (*LTS*, 264). In other instances, the constitutive rules of standard Law 1.0 legal categories will be superseded and/or made redundant: so, for example, he claims that "[t]he traditional principles and doctrines of the law of contract are being overtaken by the next generation of transactional technologies" (*LTS*, 299). Thus, while the legal-regulatory questions that students in Law School 3.0 grapple with (what is the best liability regime for autonomous vehicles? How should self-executing blockchain contracts be policed? Can 'renegade' military drones commit war crimes?) are new, their answers are sometimes filtered through old legal doctrines and categories. Their education, informed by an understanding of both normative and non-normative regulatory modes, as well as an appreciation of both the spectrum of regulatory options and the wider regulatory milieu, takes place on the cusp of old and new, a zone of conflict and complementarity.

LTS and *3.0* provide a compelling diagnosis of our regulatory predicament which is also deeply troubling. For, despite the astonishing range, clarity and scrupulousness of Brownsword's examination of the multiple challenges that predicament presents to our thinking about law and many of its guiding ideals, one cannot but worry that a dystopian future awaits. The forces driving technological management – an amalgam of surveillance capitalism, machine learning and 'on-line everything'[20] – may not be entirely benign. That much is confirmed by the latest news from the future.

A REPORT FROM 2061

At the beginning of the academic year 2061, a few traditional Law universities organised events to commemorate the centenary of *The Concept of Law*, a work by an author they regarded as one of the most important jurists of the mid-to-late 20th century.[21] In some other,

[20] For the hallmarks of this new form of capitalism, see S. Zuboff, *The Age of Surveillance Capitalism* (London: Profile Books, 2019) part I; for 'on-line everything' see A. Greenfield's *Everyware: The Dawning Age of Ubiquitous Computing* (Berkeley: New Riders, 2006) and his *Radical Technologies*, n 10 above.

[21] The last edition of this book was the 3rd, published by Oxford University Press in 2012 and edited by L. Green. Law Universities, alongside the two other types of University (of Business and of Technological Science) that

more forward looking and innovative Law universities, students and faculty organised various revues, plays and skits to mock and satirize *The Concept of Law*. In the traditional Law universities the book was celebrated as a paean to rule-regulation, an unselfconscious testament to the then dominance of the East Coast regulatory paradigm and a memorial to what lawyers once did and how they thought. In the innovative Law universities, this aspect of *The Concept of Law* gave it comedic power, illustrating a thankfully lost world in which rule regulation was fetishized and efficient technological management unthinkable.

The traditional Law universities of 2061 are found in two different types of jurisdiction. On the one hand are jurisdictions ('3.0 jurisdictions') which followed the Law 3.0 path almost exactly as foreseen by Brownsword. The memory of Law 1.0 and its guiding ideals are alive in both thought and practice in these jurisdictions, but lawyers here are smart regulators, too, just as aware of the range of technological regulatory solutions as of the requirements of the rule of law. On the other hand, traditional Law universities also flourish in throwback jurisdictions,[22] those which resisted both the instrumentalism of Law 2.0 and the technological management of Law 3.0. These jurisdictions persist with Law 1.0, having taken moral and political guidance from sources quite different to those that inspired what their jurists call Brownsword's 'ameliorist' response to technological management.[23] They eschewed technological management, simplified their laws and legal codes and have seemingly flourished as a result.

The innovative Law universities of 2061 exist in those jurisdictions ('techno-jurisdictions') which wholeheartedly adopted technological management as their response to the problems of social life.[24] There are relatively few Law universities in these jurisdictions, most of them having been subsumed within the large Technological Science universities. Wholehearted technological managers see no special or distinctive role for either law or lawyers in addressing social problems, which any technological manager worth their salt attempts to prevent before they actually arise. Oddly, the few innovative Law universities

exist in 2061, developed from the out-dated model of multi-disciplinary Universities which, although some had existed for several centuries, began to die out in the late 2020s.

[22] Also called 'Erewhon jurisdictions' by some: see R. Brownsword, 'From Erewhon to Alpha Go: For the Sake of Human Dignity Should We Destroy the Machines?' (2017) 9 *Law, Innovation and Technology* 117-153.

[23] The introductory reading for students at these Law universities is an old (and in some places completely forgotten) text: R. Epstein's *Simple Rules for a Complex World* (Cambridge, Mass.: Harvard UP, rev. ed., 1997).

[24] This move had been foreshadowed by 2019: see D. Mac Sithigh and M. Siems, 'The Chinese Social Credit System: A Model for other Countries?' (2019) 82 *Modern LR* 1034-1071.

took Brownsword's work as inspiration, regarding him, alongside Evgeny Pashukanis, as a guru of techno-regulation.[25]

Although the curriculum guidance provided in *3.0* and *LTS* has influenced the traditional Law universities of 2061, it will no doubt surprise the jurists of 2021 to learn that Legal History courses flourish in them. Furthermore, those courses provide some abiding lessons about the relations between law, technology and regulation which show that the picture provided by *3.0* and *LTS* was not quite accurate and required amendment. This is what the legal historians of 2061 claim to know:

A clean break

The legal historians of 2061 say there was a clean break where Brownsword saw a process of gradual transition. The break was not between the three stages forecast in *3.0* and *LTS*, but between two which historians came to call, in honour of Brownsword, Law 1.0, on the one hand, and the regulatory paradigm, on the other. The historians of 2061 disagree as to exactly when the regulatory paradigm emerged, although all accept that it was fully fledged by the late 1970s. Unusually, the historians are in complete agreement on two things. First, that the lawyers of the late 20th and early 21st centuries did not experience the clean break as a clean break, even though in retrospect it clearly was. And, second, that the regulatory paradigm had three clear hallmarks that marked it out from what the historians of 2061 call, non-pejoratively, 'legalism', an amalgam of Law 1.0 and some other claims about the nature of post-feudal or capitalist legality.[26]

The first hallmark is the deployment of an expansive or open-ended understanding of social and other 'problems' such that the only significant thing about them is that they present a social or other pathology in need of cure. No sustained account of the nature of social or other problems exists in the regulatory paradigm, over and beyond that what is perceived to be a problem is regarded as such, unless proven otherwise. A similar open-endedness is the

[25] It was neither Pashukanis's critique of the commodity form nor his endorsement of communism that led to his being lionised in techno-jurisdictions but his belief that, in a post-capitalist world, law becomes a matter of "technical coordination" or "administrative, technical management": E. Pashukanis, *Law and Marxism: A General Theory* (London: Pluto Press, 1983) at 131.

[26] The pejorative sense is best articulated in J. Shklar, *Legalism* (Cambridge, Mass.: Harvard UP, 1986). On the moral and political significance of capitalist law, the historians of 2061 drew inspiration from one particularly obscure source (W. Lucy, *Law's Judgement* (Oxford: Hart Publishing, 2017)) and one much less so: N. E. Simmonds, *The Decline of Juridical Reason* (Manchester: Manchester UP, 1986).

core of its second hallmark, since the paradigm also deploys an expansive view of 'solutions': these are whatever works in response to a problem, serving to eradicating it, reduce its scale or minimise its consequences. Anything goes in the search for solutions. The third hallmark is that the implicit calling of the regulator is that of the engineer solving or preventing faults.[27] Although no self-respecting social or environmental regulator would ever use the simile, they are the central heating engineers or car mechanics of the social world or the environment. Social, climate and environmental systems are, of course, much more complex than domestic heating systems and internal combustion engines, but the job of regulator is the same as that of the mechanic: here's a problem, fix it.

The growth and subsequent dominance of the regulatory paradigm went unnoticed among 20th century jurists because, obviously, it is not a uniquely juridical or legal mindset. It was not fully registered in Law Schools until the late 2020s, principally because Law 1.0 dominated the curriculum. Many law school graduates, however, had long experienced and utilised the paradigm, since it perfectly characterised the activity of most large law firm practice, which is multi-disciplinary.[28] The smorgasbord of accountancy, business, regulatory and legal expertise found in such practices confers no special significance on any particular approach. Indeed, all are equally necessary for the work – like the privatisation of public enterprises, the creation of constitutions and related good governance regimes, as well as the creation and reform of taxation, investment and banking systems – such firms do. The long felt 'disconnect' that law students experienced between their academic training and their professional practice was only partially resolved with the recognition of Law 3.0 in law school curricula.

Exposing the clean break enabled the jurists and historians of 2061 to see two things that were not completely clear to Brownsword or, at least, not explicit in either *3.0* or *LTS*. One was that the transition to the regulatory paradigm, although not explicitly registered as such during the late 20th and early 21st centuries, nevertheless caused significant juristic

[27] The tenor of the paradigm, and its second hallmark, is echoed in what Brownsword calls "the technocratic mind-set": *LTS* 197. Of technocrats, he says they "are wholly concerned with preventing or precluding wrongdoing and employing technological measures or solutions": *ibid*, 198. See also 199-204.

[28] See D. B. Wilkins and M. Esteban Ferrer, 'The Integration of Law into Global Business Solutions: The Rise, Transformation, and Potential Future of the Big Four Accountancy Networks in the Global Legal Services Market' (2018) 43 *Law & Social Inquiry* 981–1026 and A. Francis, 'Law's Boundaries: Connections in Contemporary Legal Professionalism' (2020) 7 *Journal of Professions and Organization* 70–86 for the background and prospects of such practices.

dissonance at that time. It appeared in a series of related worries about what can perhaps best be described as professional role morality, provoked by a concern that lawyers were not – or should not regard themselves as – merely technical experts engaged in the enterprise of achieving their clients' wishes. The apparent involvement of lawyers in the facilitation of torture in some jurisdictions and the outrage, professional embarrassment and self-doubt that followed from it, was an instance of this concern, as was a more general discussion and disquiet about the animating ideals of the profession.[29] There was a sense that both the profession and the discipline had become ethically unmoored. This, the historians of 2061 claim, was the result of the regulatory paradigm permeating the law. The rise of that mindset generated the worries about role morality which beset some late 20th and early 21st century lawyers, who sensed but did not clearly see the change of intellectual tide. In the techno-jurisdictions of 2061 those worries had long since disappeared, the mantra of their few Law universities being that lawyers solve problems – there is nothing else for them to do. Like other technicians, their job is to resolve the difficulties clients present, no more and no less. The regulatory paradigm dominates.

The second thing noted by the historians of 2061 reinforced their view that the most important contrast in recent legal history was between Law 1.0 and the regulatory paradigm, on the one hand, and not between the worlds of Law 1.0, 2.0 and 3.0, on the other. They discovered that the instrumentalism Brownsword regards as characteristic of Law 2.0 also preoccupied jurists in the Law 1.0 world. This led them to doubt the validity of the transition from and hence the distinction between Law 1.0 and Law 2.0. Law 2.0 is *inter alia* a matter of "determining whether the law is instrumentally effective in serving specified regulatory purposes . . . the anchoring points for regulatory instrumentalists . . . not [being] the general principles that are established in the jurisprudence but current policy purposes and objectives" (*3.0*, 33). This approach raises a concern about the coherence and consistency of the law insofar as it can be informed by a multitude of incompatible policy purposes and objectives.

But a version of this exact concern animated 18th century jurists and politicians just as much as their 20th century brethren. Four select committees were appointed in 1751, for

[29] See K. Greenberg and J. Dratel, *The Torture Papers: The Road to Abu Ghraib* (Cambridge: Cambridge UP, 2005) and A. Kronman *The Lost Lawyer* (Cambridge, Mass.: Harvard UP, 1993) for instances.

example, “charged with the task of inspecting the great numbers of acts on trade, highways, felonies and the poor” in a “systematic effort to review and order. . . legislative creation”.[30] The contemporary disquiet about the production of law was not simply a worry about volume, although those who complained about that had many good lines – the statute books “swelled to ten times a larger bulk”, or being “increased to such an enormous size, that they confound every man who looks into them”[31] – but also about coherence. There was, for example, concern about incoherence in drafting, where statutes sometimes did not even make literal sense, as well as deep worries about both coherence between different parts of the same statute and, more familiar to modern jurists, between discrete statutes. No doubt the makers of these laws took them to serve honourable and important goals, but the pursuit of such goals was singled minded, law makers being blind to the overall effect of their particular legislative endeavours.[32] Either that, or they attached no value at all to the idea that ‘the multitudinous rules of a legal system should make sense when taken together’.

The persistence and vitality of Law 1.0

The legal historians of the traditional Law universities claim not only that Law 1.0 persists in both throwback and 3.0 jurisdictions, but also – and less predictably, perhaps – that it displays remarkable resilience and vitality. Some 20th century historians had already noticed this, but many jurists of the early 21st century simply assumed Law 1.0 was bound for the dust heap of history. Two things ensured that this did not happen and neither feature fully in either *LTS* or *3.0*.

The first thing, almost completely missed by Brownsword, was that throwback and 3.0 jurisdictions rediscovered the value of Law 1.0 and post-feudal legality. That value arose in part from Law 1.0’s commitment to generality as its default regulatory setting, combined with the conceptions of equality, dignity and community it realised. Law 1.0’s commitment to setting and upholding the same legal rules for all, and viewing its addressees as bearers of exactly the same bundles of legal rights, duties, powers and liabilities, was a key part of its emancipatory power, setting it in stark opposition to feudal legality’s medley of legal statuses,

[30] D. Lieberman, *The Province of Legislation Determined* (Cambridge: Cambridge UP, 1989) at 26 and 25 respectively.
[31] See Lieberman, above, at 14 (quoting Blackstone) and 28 (quoting Lord Hardwicke).
[32] Lieberman situates Jeremy Bentham’s work as one response among many to this baleful situation: above, parts III and IV.

each bearing a commensurately different bundle of rights and duties.[33] In Law 1.0 all are the same in being ostensibly equal under and before the law, there being none of the various legal "sorts and conditions of men" that populate feudal legal systems.[34]

The jurists and citizens of throwback and 3.0 jurisdictions came to realise that, from the late 20th century onwards, their political and legal systems had been in the grip of what they called 'legismania', the incontinent and near constant production of often complex legislation. Not only did this occur in response to particular public outcries, the introduction of new law – any new law – was seen as a sign of effective government. Statutes multiplied to such an extent by the early 2030s that the warnings of the 1980s ("choking on statutes"[35]) seemed quaint, the complexity of the law in these jurisdictions being such that lawyers needed recourse to vast artificial intelligence networks to 'know' it. When combined with a penchant for technological management which, of course, cuts across any set of public-private boundaries, this meant that citizens in these jurisdictions were frequently either unwittingly caught in the maw of the law and/or faced with the covert withdrawal of options.[36] Furthermore, the technological management solution to this problem, which used artificial intelligence to generate 'micro-legal directives' appropriate to the circumstances of each person at any time and anywhere in the jurisdiction, proved not only to be unreliable and otherwise problematic.[37] It also served to remind citizens of the supposedly 'formal' virtues of post-feudal legality, generating a reaction against legal complexity and particularity, which some protesters and pressure groups dubbed Feudalism 2.0.

In both throwback and 3.0 jurisdictions the Law Reform bodies began programmes of legal simplification in response. In the former jurisdictions, that process went as far as it could

[33] Chs 1, 4, 5 and 6 of Lucy, note 26, and M. Tigar, *Law and the Rise of Capitalism* (New York: Monthly Review Press, rev. ed., 2000) unpack some of the issues here.

[34] Including Earl and Baron, Knight, serf, member of religious order, Clergy, Alien and Jew: F. Pollock and F. Maitland, *History of English Law Vol. 1* (Cambridge: Cambridge UP, 1968) 407.

[35] G. Calabresi, *A Common Law for the Age of Statutes* (Cambridge, Mass.: Harvard UP, 1982) at 1 (for the warnings of the 1750s, see note 30). See also P. Campos, *Jurismania* (New York: Oxford UP, 1998) for the related idea of 'legal gluttony'.

[36] Some private-public complexities, none of which are lost on Brownsword (see *LTS* at e.g., 71, 116-117 and 178), are elucidated in W. Lucy and A. Williams, 'Public and Private: Neither Deep Nor Meaningful?', ch 2 of K. Barker and D. Jensen (eds.), *Private Law: Key Encounters with Public Law* (Cambridge: Cambridge UP, 2013).

[37] This solution was first mooted by Casey and Niblett, note 2, at 431-434. For one of the most pressing general problems with machine learning/artificial intelligence see Y. Katz, *Artificial Whiteness* (New York: Columbia UP, 2020), part II, while an indictment of one attempt to implement AI in adjudication is found in F. Pasquale and G. Cashwell, 'Prediction, Persuasion, and the Jurisprudence of Behaviourism' (2018) 68 Supplement 1 *University of Toronto LJ* 63-81.

go, with elementary but apparently effective legal codes replacing the previous complex mass of regulatory material, both normative and technological. In the latter jurisdictions, legislative processes were amended so that all prospective legislation was subject to a cooling off period in which it underwent a Brownswordian commons and rule of law audit (the motto taking the form of a question: 'is your law really necessary?'). All proposed technological regulatory solutions – 'public' or 'private' – were subject to a duty of advanced disclosure and similarly audited, albeit by a range of different institutional forms (some jurisdictions created independent Technology Commissions, while others used existing Law Reform bodies for the task).

The second thing that ensured Law 1.0 avoided the dust heap of history was fairly often noted by Brownsword but, in retrospect, something he underplayed. It is the creative potential of Law 1.0, highlighted in its ability (i) to expand existing doctrines and rules into quite different social contexts and develop them to answer new legal questions; and (ii) to create new doctrines for different contexts and new legal questions. This capacity is principally but not exclusively exercised within the adjudicative context (20th century Law Reform bodies often worked and framed their proposals in the same way) and has always been regarded with some suspicion. One worry is about whether or not its two aspects are indeed separable, while another sees both as democratically suspect, instances of judges exercising a power held legitimately only by the legislature.

The courts of the throwback jurisdictions exercised this capacity when developing a liability regime for autonomous vehicles. The early cases began by exploring an analogy with liability for animals but expanded, over a decade or so, to develop a general principle of no-fault liability that the judges argued had been immanent in the law for more than a century.[38] The courts maintained that this principle only seemed innovative because lawyers had misunderstood the basis of liability in the so-called 'fault based' torts. There was, they maintained, very little 'fault' as traditionally understood in those torts; they were, in fact, a form of strict liability and implemented a principle of outcome responsibility *prima facie* insensitive to discriminations between intentional, reckless, negligent and 'faultless' conduct. The principle of outcome responsibility holds

[38] This approach was not unopposed; many lawyer-economists in these jurisdictions favoured the kind of approach espoused in S. Shavel, 'On the Redesign of Accident Liability in a World of Autonomous Vehicles' (2020) 49 *Journal of Legal Studies* 243-285.

> "that everything we do can be thought of as taking [or creating] certain risks and accepting others. When we take or accept risks, in our own minds or in law, we normally have in mind potential benefits that appear to outweigh the risks . . . [W]e cannot avoid the need when we act to take and accept risks, to live with the outcomes of our acts and to take responsibility for them".[39]

Running autonomous vehicles, for the courts of throwback jurisdictions, is one of those risks, much the same as keeping domestic or wild animals or bringing something dangerous on to one's land. Legally, one must live with the consequences.

The courts in the 3.0 jurisdictions also eventually adopted this liability regime, having for two decades refused to tackle the problem on the ground that

> "the better way of determining the liability arrangements for autonomous vehicles is not by litigation but 'for regulators to make the relevant choices of public policy openly after suitable democratic discussion of which robotics applications to allow and which to stimulate, which applications to discourage and which to prohibit'" (*LTS*, 248[40]).

The problem was that the regulators of the 3.0 jurisdictions, just like the throwback jurisdictions, were elected members of the legislature; the legislatures of which they were members, alongside cognate law creating institutions, having changed little since the early 21st century. Legislative logjams were just as common in the 2040s as in the early 2020s and legislators and policy makers were just as prone to blunder in both epochs.[41] The judiciary tired of waiting for legislation and succumbed to the pressure of litigation. Fortunately, the throwback jurisdictions had by this point developed their own liability regime for autonomous vehicles which the courts of 3.0 jurisdictions adopted by way of a fairly straightforward adjudicative legal transplant.[42]

CONCLUSION

[39] T. Honoré, 'Appreciations and Responses', ch 9 of P. Cane and J. Gardner (eds.), *Relating to Responsibility* (Oxford: Hart Publishing, 2001) 225-226. See also his *Responsibility and Fault* (Oxford: Hart Publishing, 1999).
[40] Quoting J. Morgan, 'Torts and Technology' in *The Oxford Handbook of Law, Regulation and Technology*, note 3 at 539.
[41] A. King's and I. Crewe's *The Blunders of Our Governments* (London: Oneworld, 2013) ran to five editions between first publication and 2061.
[42] The originator of the idea was A. Watson, *Legal Transplants* (Edinburgh: Scottish Academic Press, 1974; 2nd ed., University of Georgia Press, 1993).

Despite the complaints of future legal historians – that Brownsword sees a gradual transition when in fact there was a clean break between Law 1.0 and the regulatory paradigm, and that he overlooks the persistence and vitality of Law 1.0 – it should be clear that jurists of the present have an immense amount to learn from these two books. Combined with the work of Hildebrandt, Susskind and others, they are indispensable agenda-setting guides to the challenges of the legal present and future. Brownsword's suggestions as to how we might respond to those challenges are always interesting and informative, even – or perhaps particularly – when one has reservations about or disagrees with them. The attempt to integrate some of the most important values of the Law 1.0 world – dignity, agency, freedom and the rule of law – into a Law 3.0 environment is a pressing concern not just for jurists, but for all who inhabit the online or "'onli*f*e' world, the new everyday where anything offline is turned online, while the infrastructures that supposedly make life easy, business more effective and society less vulnerable are saturated with artificial, data-driven agency".[43]

[43] M. Hildebrandt, 'Law as Information in the Era of Data-Driven Agency' (2016) 79 *Modern LR* 1-30 at 2 (emphasis in the original).