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Law, Authority, and Respect in Our Information Societies: Three Waves of Technological Disruption

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1. Introduction

In our information societies, we act, interact, and transact in environments that are located at various points on a spectrum running from offline (analogue) to online (digital). Typically, the more that we move away from offline environments, the more that technologies bear the regulatory load; and, concomitantly, the greater the range and intensity of questions about the authority of law and why we should respect it. Given this setting, the purpose of this Working Paper is to open up a research agenda relating to three technologically-induced waves of 'disruption'[1] to traditional ideas about both the authority of law (the authority of the rules and institutions of Westphalian legal systems) and respect for the law.

Having already experienced the first of these waves of disruption, we are currently experiencing the second; and, the third is on the horizon. While the first wave has brought with it a significant disruption, an amplification of discontent with the law, it is not a game-changer. However, the second wave is a game-changer, rewriting the terms of the traditional debate. In that debate, law is presented as better than various kinds of arbitrary and disordered alternatives; but, if technologies are able to 'do governance' better than law, the challenge to law comes from a different direction—instead of law looking down on worse alternatives, it now has to look up at arguably better options. This presages a third wave of disruption when governance is predominantly by machines rather than by humans with rules; in this changed context, the question is whether it remains meaningful to employ concepts that were designed for a human rule-based enterprise and, indeed, whether the questions that we have about authority and respect are any longer relevant. If not, this third wave is more than a game-changer, it is a game-ender.

It is particularly with the development of the Internet that we encounter the first wave of challenges as doubt is cast on which system of legal rules has authority and whether legal rules are to be respected *at all* by agents who act in cyberspace. In cyberspace, land-based and territorially-defined legal systems no longer are controlling; cyber-borders do not map onto land borders; it is not obvious that land-based orders maintain their monopoly on authority and

[1] There are many ways in which Law might be 'disrupted'. It might be that the application of traditional legal doctrines, concepts, templates, classifications, and the like, to novel phenomena or circumstances associated with a new technology is problematic. Or, it might be that the disruption impacts on legal practice, on what we do and how we do it. Or, as in the current paper, the disruption might impact on our conceptual thinking, our values, or our attitudes, and so on. For discussion, see, e.g., Roger Brownsword, 'Law and Technology: Two Modes of Disruption, Three Legal Mind-Sets, and the Big Picture of Regulatory Responsibilities' (2018) 14 *Indian Journal of Law and Technology* 1, 'Law Disrupted, Law Re-imagined, Law Re-invented' (2019) 1 *Technology and Regulation* 10, and 'Political Disruption, Technological Disruption, and the Future of EU Private Law' in Mateja Durovic and Takis Tridimas (eds), *New Directions in EU Private Law* (Hart, 2021) 7.

jurisdiction.[2] While this development foreshadows a radical challenge to legal authority and to respect for the law, even in its more aggressive cyber-libertarian forms, it does not depart from the traditional paradigm of governance by humans and governance by rules.

However, the first disruptive wave is followed by a second, this time raising the prospect of governance by machines and technological management that present more fundamental questions about modes of governance and, with that, about how we now view the idea of the authority of law, its institutions and officials, and respect for the rules of law.

Lest this prospect seems a bit fanciful, we should note how governance by technologies has insinuated itself into many professional sports. Once upon a time, horse races were started by an official who dropped a flag; and, at the finishing line, an official called the winner of the race. Nowadays, we have mechanical starting stalls and, at the finishing line, we have cameras. More significantly, in soccer, rugby, cricket, and tennis, off-pitch officials and technologies play a role in supporting and correcting on-field decisions. In some sports, the authority of human officials (umpires) is open to limited challenge—interestingly, with the appeal being from solely human on-field decisions to off-field technological review rather than (as Art 22 of the GDPR contemplates) this being an appeal from the technology to a human; and, in other sports, off-field humans assisted by technology make the decisions. In professional soccer, where on-field respect for officials had reached an all-time low, the players now submit to the technology. Whether or not the players respect the technology and whether or not spectators prefer their sport (like their music) 'unplugged' or technologically-assisted is another matter.

In these sports, it seems like a time of technological transition and the question is this: what are the implications for legal authority and respect for legal rules and officials if a similar transition takes place in the law? To the extent that legal authority and respect for the law hinge on Law being better than the alternative, what are the implications of a technological alternative?

While this second wave of disruption is the primary focus for the paper, it presages a third wave. In his influential book, *After Virtue*, Alasdair MacIntyre argued that, even though the language of morality might persist, its concepts lose their meaning when the context in which they have been developed itself changes.[3] So, updating this argument, we might say that the concept of moral virtue loses its meaning where, in technologically managed contexts, agents are free to act only in the way that the technology permits. Where technological management forces a particular action, this might not reflect badly on the agent, but there is no virtue in so

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[2] Anticipating such radical change, see David R. Johnson and David Post, 'Law and Borders—The Rise of Law in Cyberspace' (1996) 48 *Stanford Law Review* 1367. Opening their paper, Johnson and Post state (at 1367):

> Global computer-based communications cut across territorial borders, creating a new realm of human activity and undermining the feasibility—and legitimacy—of laws based on geographic boundaries. While these electronic communications play havoc with geographic boundaries, a new boundary, made up of the screens and passwords that separate the virtual world from the 'real world' of atoms, emerges. This new boundary defines a distinct Cyberspace that needs and can create its own law and legal institutions. Territorially based law-makers and law-enforcers find this new environment deeply threatening.

[3] Alasdair MacIntyre, *After Virtue* (Duckworth, 1981).

acting.[4] Accordingly, the third wave of disruption impacts on a raft of concepts that are meaningful when the context is governance by humans and by rules but not so once the context is governance by technology—and, moreover, not so even though we might persist in trying to transplant the language of one context to the other.

The Working Paper has six main sections.

In Section 2, the first disruptive wave is sketched. The questions that are now posed about the authority of law and respect for the law are not provoked by emerging technologies in general (even by those technologies that do regulatory work). As we have said, it is specifically the development of cybertechnologies and cyberspace that is critical for this first disruption.

In Section 3, the traditional debate about the authority of, and respect for, the law is outlined. That debate, I will suggest, bottoms out on whether we have prudential or moral reasons to treat law as 'preclusionary'[5] in the way that the claims to authority and for respect have it—that is to say, in the way that it is claimed that we should recognise the authority of legal rules simply because they are 'the law'; and that we should respect legal requirements and prohibitions simply because they are provided for by 'the law'.

Section 4 engages with the traditional justifications, prudential and moral, for such demands. Here, I will suggest that the plausibility of the traditional justifications is context dependent. In some contexts, the prudential case looks plausible; in others, the moral case looks plausible; but, in too many contexts today, neither case looks plausible. In contexts of plurality and scepticism, I will identify two pressure points for the plausibility of either of the traditional views. One pressure point is revealed when individuals question the sense of particular legal requirements; and the other arises when a hard look is taken at the supposed source of legal authority.

In Section 5, we get to the second—and, for present purposes, the focal—wave of challenges and questions, as the prospect of governance by technical measures and technology disrupts the traditional debate. On one analysis, the debate still rests on a choice between prudential and moral justifications, but the relevant considerations are now quite different. Instead of comparing law with a worse alternative, we now have to compare it with a seemingly better-performing alternative. However, on another analysis, this does not capture the nature and significance of the disruption. Prefiguring the third wave of disruption, the thought is that what

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4 See, e.g., Roger Brownsword, 'Lost in Translation: Legality, Regulatory Margins, and Technological Management' (2011) 26 *Berkeley Technology Law Journal* 1321; Ian Kerr, 'Digital Locks and the Automation of Virtue' in Michael Geist (ed), *From 'Radical Extremism' to 'Balanced Copyright': Canadian Copyright and the Digital Agenda* (Irwin Law, 2010) 247; and Shannon Vallor, *Technology and the Virtues* (Oxford University Press, 2016).

5 By 'preclusionary', I mean that the imprimatur of 'Law' (in relation to an institution, official, rule, decisions, requirement, and so on) is decisive; there is nothing further to be said; Law precludes debate. Law, per se, has authority, and commands unquestioning respect and compliance. Compare the analysis of 'authority' in Joseph Raz, *The Authority of Law* (Oxford University Press, 1979). Raz devotes only one chapter, Ch 13, to 'respect' for the law. His position is (i) that, because (so he contends) there is no general obligation to obey the law, this cannot be the basis for an attitude of practical respect for the law, but (ii) it is nevertheless permissible (optional) for a person to adopt an attitude of respect for the law (in a way analogous to friendship) which then gives reasons for obeying the law (other things being equal).

is disrupted is not so much the terms of the debate but the context in which the traditional debate is located—a context in which it is meaningful to ask whether law has 'authority' and whether we should 'respect' it, and which supports human communities to exercise their prudential and moral judgments.

In Section 6, I characterise the choice that our information societies now face as one between, on the one hand, human-centric governance, not perfect but always an expression of human striving and, on the other, a technological form of governance that is human protective in a paternalistic way but not truly human-centric. Stated shortly, this is a choice between some version of governance by humans (self-governance) and benign governance for humans (but not by humans). On this analysis, we need to be very careful about paving the way for governance by machines, no matter how well such governance seems to serve our collective interests and how well it seems to articulate the community's morality.

Section 7 introduces the third wave of disruption. Here, I sketch a short agenda of questions that are prompted by this wave of disruption. In particular, how far do the conceptual ideas and the questions that accompany governance where humans are still the authors of regulatory measures remain meaningful once that context changes to governance by technologies? Is it helpful or appropriate to try to transplant the language of authority, respect, trust, justice, and so on that is characteristic of human governance to governance by machines? And, should we try to rework the ideas that stand behind this language or start again with a conceptual scheme that fits a world of governance by technology?

Finally, in some short concluding remarks, I underline the significance of these disruptions. It would be no exaggeration to say that, in what are still the early years of information societies, humans face some fundamental choices about how they relate to technology.[6]

2. The First Wave of Disruption

Where agents act in cyberspace in ways that have some connection with more than one legal system, there is an obvious question about which rules of which legal system will be treated as applicable. However, this is not a radically disruptive question; this is a question that conflicts lawyers are used to asking in offline cross-border disputes.[7] The radical challenge is provoked by the question: why should we recognise the rules of any legal system as having authority, why not treat our own codes of conduct as authoritative?

Picking up this thread, Chris Reed and Andrew Murray[8] argue that, whatever the plausibility of claims to authority in offline analogue legal systems, these do not translate across to the online environments of cyberspace. In the latter, where individuals are presented with a plurality of authority and legitimacy claims, the self-validating claims of national legal systems will not suffice. Summing up their analysis in four key points, Reed and Murray say:

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6 Compare Victoria Sobocki, 'Avoiding the Gilded Cage of Tech, Striking the Balance Between too Little and too Much Technology: Artificial Intelligence and Legal Disruption' paper presented at conference on 'Law, Technology, and Disruption' held at City University Hong Kong, March 19-21, 2021.

7 Compare Uta Kohl, *Jurisdiction and the Internet: Regulatory Competence over Online Activity* (Cambridge University Press, 2007).

8 Chris Reed and Andrew Murray, *Rethinking the Jurisprudence of Cyberspace* (Edward Elgar, 2018).

> The first [point] is that law has two main sources of authority: that deriving from the lawmaker's constitution, which in the case of state law is clear authority only for persons physically present in the state's territory; and the authority which comes from acceptance of a rule by a community. The second is that jurisprudence in cyberspace is exclusively concerned with the second source of authority, and needs to identify it at the level of individual rules rather than considering the authority of the entire body of the lawmaker's output. Third, laws compete for authority in cyberspace, and they compete with social and other norms as well as other laws, so that the authority of a law and also the demands it is able to make depend on how well it does in that competition. Finally, although lawmakers may be able to do little to enhance their authority claims, they can certainly weaken them by failing to establish the legitimacy of those claims and by impairing the rule of law through making authority claims which go beyond the boundary of the lawmaker's community.[9]

This critique of authority is closely related to Reed and Murray's analysis of legitimacy and the Rule of Law.[10] Taking acceptance by the individual as focal, their 'message' is that 'the legitimacy, efficacy and normative acceptance of law norms in the online environment are predicated upon their acceptance by the community and by the individual in that community.'[11] In other words, claims to authority are not vindicated by constitutional declaration or by the practice of officials who are authorised by such declaration, but depend on recognition and acceptance by the community and its individual members.

Once those who act in cyberspace question the authority of national legal systems, respect for the law is thrown into jeopardy; and, whatever commitment there is to the Rule of Law, it does not align with the rule of national legal systems. Now, it might be argued that respect per se has been done no favours by cyberspace. For example, a decade ago, in their book, *The Offensive Internet*, Saul Levmore and Martha Nussbaum highlighted concerns about the way in which online anonymity seemed to encourage a level of incivility and offence that one would not expect to encounter offline where those acting in such a manner could be identified.[12] Since then, it has become all too easy to point to the culture of online disrespect for others—indeed, the Internet has brought us a whole lexicon of disrespectful acts, such as 'flaming', 'trolling', and 'doxxing'—as well widespread disrespect for IP laws such as copyright and trade marks (witness, for example, illegal peer-to-peer file sharing and the thousands of web sites that trade in counterfeit designer goods). However, it is specifically a lack of respect for the law that is at issue.

What is at issue, is the disrespectful attitude that Joel Reidenberg detected amongst the 'Internet separatists',[13] who seemed to think that the Rule of Law (and national rules of law) simply do not apply to their on-line activities. This seems to be the case, for example, when millions of

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9 Ibid., at 234-235.

10 For legitimacy, see ibid. Ch 7, and for the Rule of Law, see ibid Ch 8.

11 Ibid. p 228.

12 Saul Levmore and Martha C. Nussbaum(eds), *The Offensive Internet* (Harvard University Press, 2010).

13 Joel R. Reidenberg, 'Technology and Internet Jurisdiction' (2005) 153 *University of Pennsylvania Law Review* 1951.

youngsters engage in unlawful file-sharing, when thousands of users of Twitter conspire to disclose the identity of persons in defiance of protective court orders,[14] and when trolling and online racial abuse is rampant. Hence, as Reidenberg says:

> The defenses for hate, lies, drugs, sex, gambling, and stolen music are in essence that technology justifies the denial of personal jurisdiction, the rejection of an assertion of applicable law by a sovereign state, and the denial of the enforcement of decisions….In the face of these claims, legal systems engage in a rather conventional struggle to adapt existing regulatory standards to new technologies and the Internet. Yet, the underlying fight is a profound struggle against the very right of sovereign states to establish rules for online activity.[15]

Not only that: what is also at issue is Yahoo's famous refusal to accede to the order of the French court in the LICRA case.[16] What is at issue is Mark Zuckerberg's well-publicised reluctance to appear before parliamentary committees concerned about Facebook, fake news, disinformation, and data privacy issues.[17] In other words, what is at issue, too, is the attitude and culture of big tech.[18]

So, whether we focus on the attitude of cyberlibertarians who deny that the writ of legal authority extends to cyberspace, or the disrespect of the Internet separatists, or the attitude of the big tech CEOs, we have a direct challenge to traditional demands made for the authority of and respect for the law. In all these instances, the question is: why should we recognise the authority of your rules simply because they are presented as 'the Law'; why should we respect the requirements and prohibitions of your rules simply because they are presented as 'the Law'?

Disruptive though these questions provoked by cyberspace are, they are still posed within the traditional paradigm of governance by humans and governance by rules. In this Working Paper my question is: if we move away from governance by humans and by rules to governance by technologies, how does this impact on our traditional questions about authority and respect for the law? If we do move to a more technological mode of governance, we come to a second wave of challenges to traditional thinking about law, authority, and respect. Here, the main challenge to the authority of law and respect for the law is not so much a failure by citizens to comply with the legal rules, or a problem about knowing which set of rules is authoritative, but the replacement of governance by rules by governance by technology.

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14 See, e.g., Frances Gibb, Anushka Asthana, and Alexi Mostrous, 'Paper Faces Legal Threat over Picture of Footballer' *The Times*, May 23, 2011, p1 (the Ryan Giggs case).

15 Reidenberg (n 13), at 1953-1954.

16 The story has been told many times but, for one of the best renditions, see Jack Goldsmith and Tim Wu, *Who Controls the Internet?* (Oxford University Press, 2006) Ch 1.

17 See. e.g., Lauren Feiner, 'Mark Zuckerberg turns down UK parliament request to answer questions about fake news and data privacy on Facebook', CNBC November 7, 2018: available at https://www.cnbc.com/2018/11/07/mark-zuckerberg-declines-uk-parliament-invite-to-discuss-privacy.html (last accessed March 6, 2021).

18 Compare the critique in Shoshana Zuboff, *The Age of Surveillance Capitalism* (Profile Books, 2019).

3. The Second Wave I: The Traditional Debate

The backcloth to traditional jurisprudential debates about either the authority of, or respect for, the law is the opposition between legal positivist and legal idealist conceptions of law. While the former relies on prudential reasons (law being favourably compared with less well-ordered alternatives, primarily some 'lawless' alternative),[19] the latter relies on moral reasons (law being viewed as an essentially moral enterprise and, if comparisons are being made, being favourably compared with an enterprise that simply has no aspiration systematically to do justice).

Broadly speaking, the shape of the arguments is similar whether we are focusing on legal authority or on the question of respect. In both cases, the key question is why we should defer to the directives, decrees and decisions of others simply because they come with the imprimatur of 'the Law'. Even if we disagree with the sense of the position taken by lawmakers, or if compliance raises questions of conscience, the demand to recognise the authority of the law and to respect its rules is unqualified. In this part of the article, we will simply outline the salient features of the two positions, the prudential and the moral, that purport to justify such a demand.

3.1 The legal positivist/prudentialists' view

The paradigmatic setting for the legal positivist/prudentialist view is that of a community that treats law and morals as independent spheres, each being a discrete department of practical reason, each being a distinct practical discourse. Like planets that occupy the same Universe but orbit independently of one another, law and morals are always separate and distinct although there will be cases where they come quite close to one another. If law is to be respected in such a community, this is not to be understood to be an appeal to good morals (although, no doubt, the moral high ground will be taken by those who demand respect if the opportunity presents itself).

This is not to say that law is not valued in this community of legal positivist prudentialists; and, indeed, by and large, members of such a community might happily comply with legal rules. Nevertheless, to use HLA Hart's terminology[20], the internal aspect of those who comply for prudential reasons is not the same as the internal aspect of those who comply for moral reasons. The question is: what is it about law so conceived, the positive requirements of which will quite possibly conflict with an individual's sense of their (at any rate, short-term) self-interest, that reasonably commands not just a modicum of respect but unquestioning compliance?

In the 1970s, E.P. Thompson shocked some fellow left-leaning intellectuals when he declared that the Rule of Law, the rule of rules, was an unqualified good.[21] What Thompson meant was that the rule of rules was a better option than the alternative, where that alternative was the

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19 Often, the moral alternative is also compared unfavourably with the order promised by the legal positivist version of legal order. However, the reasons given here are spurious: see Deryck Beyleveld and Roger Brownsword, 'The Practical Difference Between Natural-Law Theory and Legal Positivism' (1985) 5 *Oxford Journal of Legal Studies* 1.

20 HLA Hart, *The Concept of Law* (Clarendon Press, 1961).

21 EP Thompson, *Whigs and Hunters: The Origin of the Black Act* (Pantheon Books, 1975) at 266.

arbitrary rule of the powerful. At least, with the rule of rules, the powerful would be constrained by their own rules; and, given a reasonable warning of what the sanctions would be for breach of the rules, the less powerful would have a chance of avoiding unanticipated penalties and punishments. In this way, Thompson echoed not only Lon Fuller—who argued that the procedural constraints of his idea of legality would tend to discourage the exercise of arbitrary power[22]—but also Judith Shklar who had already highlighted the virtues of legalism in preference to the lawlessness of both fascist and Stalinist regimes.[23]

Similarly, we might hear echoes of this line of thinking in Alain Supiot's commentary on the replacement of law with governance, the flattening of relevant considerations for governance, and the decline of respect for law.[24] Once the 'law' ceases to offer any resistance and is used merely as a tool, those who are subjected to its instrumentalism no longer have any reason to pledge their allegiance to it.

So, from a prudential perspective, it is arguable that the rule of rules is unquestioningly to be preferred to the lawless and order-less alternative (the rule-less Wild West); and, it is also arguable that, where people want to know where they stand, the legal positivist version of rule by rules is to be preferred to any moral conception that invites contestation around its central idea of a *just* order.

3.2 The legal idealist/moralists' view

The paradigmatic context for the legal idealist/moralist view is an aspirant moral community, its members not only committed both individually and collectively to doing the right thing, but also sharing a view as to the guiding principles for the community. Such principles might be founded on a religious code or credo, as in the Thomist tradition.[25] Equally, though, the picture might be entirely secular.[26] In such a context, the Law, as a direct translation of the Moral Law, would necessarily be regarded as authoritative and it would command respect.

Where the life and times of a community are fairly static, where little changes from one generation to the next, and where there is little communication or interaction with other communities, then the moralists' picture might be both plausible and sustainable.

Crucially, in this picture, the members of a moral community respect the law not only when, by their lights, legal prescriptions guide correctly towards doing the right thing but even when it is either unclear or controversial whether they are guiding in the right direction. Looking back, the fact that those who are responsible for making the law are attempting in good faith to maintain the community's moral commitments is sufficient reason to treat the mere fact that this is the law as a good reason for respecting the institution, respecting its officials, and

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22 Lon L. Fuller, *The Morality of Law* (Yale University Press, 1969).

23 Judith N. Shklar, *Legalism* (Harvard University Press, 1964).

24 Alain Supiot, *Governance By Numbers* (trans by Saskia Brown) (Hart, 2017).

25 The leading example in modern jurisprudence is John Finnis, *Natural Law and Natural Rights* (Oxford University Press, 1980).

26 As argued, for example, in Deryck Beyleveld and Roger Brownsword, *Law as a Moral Judgment* (Sweet and Maxwell, 1986; reprinted by Sheffield Academic Press, 1994).

respecting its prescriptions; and, looking forward, members will be mindful that the consequences of not respecting the law might be to undermine the moral aspiration of the community—it would be all too easy to slip back to governance that lacks any such aspiration for *just* order.

Taking such an approach, for the legal enterprise to command our respect, to appreciate why law really matters, it must be conceived of as an integral part of the practice of an aspirant moral community.[27] So viewed, the legal enterprise does not need to align perfectly with the Moral Law, but it must represent a good faith and serious attempt to do the right thing, to do justice.[28] Thus, the reason why law should be respected is not because it is the perfect articulation of the Moral Law but because it is an enterprise guided by moral aspirations. Communities that fully commit to law are making a moral, not a prudential, declaration.

Accordingly, as this sketch would have it, respect for the law is largely a matter of respect for moral aspiration and integrity. Respect for the authority of legal officials is respect for persons who are trying to do the right thing, and respect for their rules and decisions is respect for an enterprise that is predicated on translating moral pluralism into provisional regulatory positions and determinations.

4. The Traditional Views: Plausibility and Context

Once we take the traditionally opposed views out of their paradigmatic contexts, the plausibility of their respective justifications for deference to legal authority and respect for the law is reduced. In communities that are secular, where citizens are used to forming their own judgments (prudential and moral, individual and collective), and where 'ethics' is widely thought to be 'just a matter of opinion', these views come under strain. Once citizens start to question the good sense of legal positions, processes, and decisions; or once citizens start to doubt the moral guidance offered by the law, the claims to authority and for respect can look over-demanding or simply implausible.

In what follows we can identify two pressure points at which either view is likely to come apart. In both cases, we are assuming a context in which a hard look is being taken at the demands made by the law. The first pressure point, found in a context of plurality, is revealed where individuals want to make up their own minds about the prudential or moral sense of the law's particular demands; and the second pressure point, found in a context of scepticism, is revealed when citizens ask questions about the source of legal authority.

4.1 In a context of plurality: individuals making their own prudential and moral judgments

In 2021, many societies exhibit high levels of plurality, of competing views about what is in the community's best interest. For example, there have been many different (prudential) judgments about the timing and extent of the legally imposed restrictions on freedom of movement and association at the time of the Covid-19 pandemic. Few would gainsay that governments lack the general authority to respond to public health emergencies and have legal authority to introduce measures of the kind adopted; but, that is not the question. The question

[27] Here, readers might detect some echoes from Alon Harel, *Why Law Matters* (Oxford University Press, 2014).

[28] This is the thrust of the legal idealist position argued for in Beyleveld and Brownsword (n 26).

is why one should comply with the particular restrictions that have been imposed simply because they are the law. Indeed, in the United Kingdom, where the government's response was clearly inadequate, the former Supreme Court Justice, Jonathan Sumption, was reported as saying that 'people should make their own decisions in the light of their own health and that the law should be a secondary consideration for them.'[29]

In such a setting, it is tempting to introduce a proviso that licenses citizens, in exceptional circumstances, to back their own prudential judgments so long as they submit to whatever legal penalties there might be. This seems to be Sumption's position. However, this throws into doubt the background prudential judgment on which the preclusionary demands for respect for the law are made. Once this background judgment is up for debate, it is unclear how broad the proviso should be and where the exceptional case begins and ends. In fact, this is analogous to the familiar vulnerability of the default rules prescribed by rule utilitarians: once (act) utilitarians start reassessing the utilities case-by-case, the benefits of the default rule are compromised.[30]

At the same time, in the world as we know it in the present century, one of the many disruptive effects of emerging technologies is to the conditions that sustain the moralists' picture. When the context for community life changes rapidly, when the application of the guiding principles is moot, it is the task of the law to take a position, a position with which some members might (as the community would see it) reasonably disagree. For example, developments in modern biotechnology have provoked huge challenges for the law—not least in provoking new debates about the interpretation of human dignity[31]—as it is compelled to arbitrate between religious and secular views and between the ethics of prohibition and the ethics of permission.[32] Again, developments in neuroscience and neurotechnologies have raised questions about the fairness of the criminal justice system, especially about penal practice.[33] Nevertheless, in this context,

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29 C.J. McKinney, 'Coronavirus laws a "secondary consideration", says Sumption', *Legal Cheek* (September 14, 2020): available at https://www.legalcheek.com/2020/09/coronavirus-laws-a-secondary-consideration-says-sumption/ (last accessed September 16, 2020).

30 Compare Raz's example of the traffic signals, (n 5) at 16 and esp 25.

31 See, e.g., Deryck Beyleveld and Roger Brownsword, *Human Dignity in Bioethics and Biolaw* (Oxford University Press, 2001).

32 See, e.g., Roger Brownsword, *Rights, Regulation and the Technological Revolution* (Oxford University Press, 2008); 'Human Dignity, Human Rights, and Simply Trying to Do the Right Thing' in Christopher McCrudden (ed), *Understanding Human Dignity* (Proceedings of the British Academy 192) (The British Academy and Oxford University Press, 2013) 345; 'Regulatory Coherence—A European Challenge' in Kai Purnhagen and Peter Rott (eds), *Varieties of European Economic Law and Regulation: Essays in Honour of Hans Micklitz* (Springer, 2014) 235; and 'Developing a Modern Understanding of Human Dignity' in Dieter Grimm, Alexandra Kemmerer, and Christoph Möllers (eds), *Human Dignity in Context* (Nomos and Hart, 2018) 299.

33 See, e.g., Joshua Greene and Jonathan Cohen, 'For the Law, Neuroscience Changes Nothing and Everything' (2004) 359 *Philosophical Transactions of the Royal Society B: Biological Sciences* 1775; and, for the counter-view, see, Stephen A. Morse, 'Lost in Translation? An Essay on Law and Neuroscience' in Michael Freeman (ed), *Law and Neuroscience* (Oxford University Press, 2011) 529, and 'Law, Responsibility, and the Sciences of the Brain/Mind' in Roger Brownsword, Eloise Scotford, and Karen Yeung (eds), *The Oxford Handbook of Law, Regulation, and Technology* (Oxford University Press, 2017) 153.

respect for the law signifies that, such disagreement notwithstanding, a positive attitude towards legal prescriptions and legal institutions should be maintained.

Moreover, modern moral communities might be even more pluralistic than this. There might be disagreement not only about the application of guiding principles to particular hard cases but also about which principles should be treated as guiding. Where the reference standards or values for doing the right thing are themselves contested, the law faces a greater challenge because the best attempt at accommodating moral disagreement might mean that very few or even no-one in the community actually supports the (compromise) position that is adopted.[34] Once again, though, to demand respect for the law is to demand that all members of the community continue to view the law and its prescriptions in a positive light.

As with the prudential view, the default moral argument will be put under stress unless a conscientious objection clause is recognised; and, again the dilemma is the same. Should we decline to recognise an exception and then risk being accused of overclaiming and inviting rejection of the claim as wholly unreasonable? Or, should we create an exception but then risk underclaiming and compromising the preclusionary effect of the imprimatur of Law?

4.2 In a context of scepticism: the question of the source of legal authority

For both legal positivists and legal idealists claims to legal authority (particularly where it is a matter of title that is at issue) are validated by reference back to their source.

According to legal positivists, the answer to a question about the authority (title) of a body or person undertaking a legal function (or claiming to act in a legal capacity) hinges on whether there is an appropriate mandate in a recognised authorising rule. In the case of legislative and judicial bodies, this authorisation might be explicitly declared in the founding constitutional rules; in other cases, the authorisation will be found in rules that have themselves been made by authorised rule-makers. On this account, the chain of title takes us back to the constitution, or the rule of recognition, or the last norm of positive law, or some such apex rule within the particular legal system. This means that, in the final analysis, the system purports to be self-validating. It means that the plausibility of all claims to authority within the system are contingent on acceptance of the apex rule as the ultimate test of authority. Ultimately, the authority of law rests entirely on a convention. Such a contingency is the Achilles Heel of the legal positivist/prudentialist view of legal authority.

There a number of responses to this problem, to the apparently unauthorised nature of the apex authorising rules themselves. One response, famously advanced by Hans Kelsen, treats this as a logical problem because there seems to be no end to the chain of authorisation. Kelsen's proposal is that we should presuppose a hypothetical rule (the 'Basic Norm' in Kelsen's terminology) that stands just outside the legal system and which authorises the apex rule or norm.[35] However, even if we accept the fictitious Basic Norm as a kind of logical full-stop, it does nothing to answer the practical and normative questions raised by citizens. Another response is to present the apex rule as the agreed reference point for testing authority, the agreement taking the form of a social contract. Those who are parties to the contract are then

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[34] Compare Roger Brownsword, 'Regulating the Life Sciences, Pluralism, and the Limits of Deliberative Democracy' (2010) 22 *Singapore Academy of Law Journal* 801.

[35] Hans Kelsen, *The Pure Theory of Law* (2nd ed) (University of California Press, 1967).

precluded by their consent from disputing the apex rule as the test. Again, though, while this might be sound in principle, in practice it is also something of a fiction.[36]

For legal idealists, the last norm of positive law is never going to be the ultimate source of legal authority. Law has to be connected to some external moral standard or order and this is where the source of legal authority eventually will be found. While this narrative might be plausible in some contexts, it lacks plausibility where communities have stopped believing in the divine right of Kings, or similar justificatory tales. Particularly in those communities where there is a pragmatic acceptance that the authority of law rests only on a convention, the moral account will be rejected as a legacy of primitive thinking.

While there is a great deal more that could be said about these much-debated jurisprudential puzzles, the bottom line is that the traditional source-seeking views are in trouble once we take a hard look at them. However, for present purposes, this is of limited importance. Both sides in the traditional debate might wobble but the shape of the debate has not yet been radically disrupted. It is when we contemplate a switch from governance by rules to governance by rules together with technical measures and governance by machines and 'technological management' that we get to the radically disruptive second wave of challenges and questions.[37]

5. The Second Wave II: The Traditional Debate Disrupted

The disruption brought about by governance by technology impacts on both sides of the traditional debate. On the one side, the prudential case for Law is challenged by technologies that promise to outperform humans and rules in achieving order. It is no longer enough to argue that Law, albeit less than perfect, is preferable to a lawless and disordered Wild West. Governance by technology claims that it can put in place a near perfect form of order. On the other side of the traditional debate, governance by technology also promises to outperform the aspirant moral order of Law. Whether we are thinking just about order, or about just order, the argument for the machines is that they can outperform the human enterprise of Law; what we should be deferring to is the judgment of the machines.

To be sure, there will be a debate about whether governance by technology can live up to its promise.[38] If we assume that it can, then the traditional debate—which sets one version of human governance against another—is displaced by a quite new debate about authority and

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36 Compare Deryck Beyleveld and Roger Brownsword, *Consent in the Law* (Hart, 2007).

37 Broadly speaking, by 'technological management' I mean the use of technologies—typically involving the design of products or places, or the automation of processes—with a view to managing certain kinds of risks by excluding (i) the possibility of certain actions which, in the absence of this strategy, might be subject only to rule regulation or (ii) human agents who otherwise might be implicated (whether as rule-breakers or as the innocent victims of rule-breaking) in the regulated activities. See, further, Roger Brownsword, *Law, Technology and Society: Re-imagining the Regulatory Environment* (Routledge, 2019) 40-42. Compare Ugo Pagallo, *The Laws of Robots* (Springer, 2013) 183-192, differentiating between environmental, product and communication design and distinguishing between the design of 'places, products and organisms' (185).

38 See, e.g., Robert Sparrow, 'Why machines cannot be moral' (2021) *AI & Soc*, available at https://doi.org/10.1007/s00146-020-01132-6; and, Hubert Etienne, 'The Dark Side of the "Moral Machine" and the Fallacy of Computational Ethical Decision-Making for Autonomous Vehicles' (2021) 13 *Law Innovation and Technology* 85.

respect where the choice is between either governance by humans and rules or governance by technologies.

In a world of rapid technological development and increasing automation, and in the shadow of disruption, we find another picture forming, one that seeks to preserve the human dimension of law. Relative to Lon Fuller's idea of the legal enterprise as that of subjecting human conduct to the governance of rules,[39] the emphasis in this picture is not so much on rules as on *humans*; and the reasons for respecting law all relate to the virtues of governance by humans rather than governance by machines.[40]

This human-centric picture is one of a community that now not only has at its disposal a range of technologies that can be deployed for regulatory purposes but also an appreciation that such tools might be more effective than rules. This is a community that has come to realise that, far from being a regulatory challenge, technologies can be a regulatory opportunity. In other words, this is a community in which 'law 3.0' (as I would term it) is already part of the conversation.[41] However, where the functions of law are automated, we are being asked to respect an enterprise that takes humans out of the loop.

From a prudential perspective, the automation of legal functions, the replacement of human officials with machines, might seem risky relative to one's interests. Teething problems are to be expected and over-reliance on the technology might leave both individuals and communities ill-prepared for situations in which there are technological malfunctions or breakdowns. Without reassurance about the reliability and resilience of the technology, it is unclear whether one should prefer, so to speak, a West coast regulatory approach with its aspiration of total technological management that will guarantee perfect control and compliance or the traditional East coast approach where compliance is far from perfect, and where detection and enforcement is also far from perfect.[42] In this light, we might recall Samuel Butler's *Erewhon*[43] where the Erewhonians—concerned that their machines might develop some kind of 'consciousness', or capacity to reproduce, or agency, and fearful that machines might one day enslave humans—decided that the machines must be destroyed. The Erewhonians, so to speak, opted for the East coast.

Similarly, from a moral perspective, it is unclear whether submitting to governance by smart machines is doing the right thing. If we value human discretion in the application of rules, we might worry that, with automation, this is a flexibility that we will lose.[44] Moreover, to the

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39 Lon Fuller (n 22).

40 See, e.g., Mireille Hildebrandt, *Smart Technologies and the End(s) of Law* (Elgar, 2015). On which, see Roger Brownsword, Disruptive Agents and Our Onlife World: Should We Be Concerned?' (2017) 4 *Critical Analysis of Law* 61.

41 See Roger Brownsword, *Law 3.0: Rules, Regulation and Technology* (Routledge, 2020).

42 Seminally, see Lawrence Lessig, Code and Other Laws of Cyberspace (Basic Books, 1999). Compare, Roger Brownsword, 'Code, Control, and Choice: Why East is East and West is West' (2005) 25 *Legal Studies* 1

43 Samuel Butler, *Erewhon* (Penguin, 1970; first published, 1872).

44 For some pertinent examples, see Robert Veal and Michael Tsimplis, 'The integration of unmanned ships into the lex maritima' [2017] LMCLQ 303.

extent that the morality inscribed in machines tends to be utilitarian, this will be unattractive to those moral constituencies that oppose such reasoning.[45] As with the prudential rejection of governance by machines, conserving governance by rules, made by humans and administered by humans, might seem to be the morally indicated option.

In the influential writing of Mireille Hildebrandt, we find this kind of picture of law, with on the one side 'legality' (due process and justice) being valued against mere 'legalism (mechanical application of the rules) and, on the other, governance by rules being valued against rule by technologies. Accordingly, although Hildebrandt shares the common convention that, when we speak about the law, we refer to 'an institutional normative order',[46] in her distinctive conception of law we find: that legal standards are co-produced (reflecting a commitment to participatory and inclusive democratic practices); that the 'mode of existence' of modern law, with printing technology providing its infrastructure, is in the form of texts (statutes, codes, precedents, and so on); that legal texts are open to interpretation and contestation (in courts) before their application in individual cases; and that these features, in combination, enable law to serve more than the demand for certainty by responding to the demand for individual justice and for legitimate purposes.[47] By contrast, where order is controlled by technological regulation, we find a very different story. First, technological regulation is not 'controlled by the democratic legislator and there is no legal "enactment"'; secondly, the design of technological devices might be such as to 'rule out violating the rule they embody, even if this embodiment is a side-effect not deliberately inscribed'; and, thirdly, 'contestation of the technological defaults that regulate our lives may be impossible because they are often invisible and because most of the time there is no jurisdiction and no court'.[48] Stated shortly, Hildebrandt's concern is that smart machines will enhance the power of, and expand the possibilities for, technological regulation in a way that crowds out the features that we value in law. To which we might add that, once we lose what we value in this picture of law, we lose the basis for our respect.

However, to play Devil's Advocate, suppose that we radically revise our conceptual thinking so that we come to view law as an expert system, not so much an assembly of philosopher kings as an assemblage of smart machines that can out-calculate, out-compute, and out-perform even the most intelligent and wisest of humans. If this is the relevant picture of law, then would it not be crazy for humans to back their own judgments, both prudential (for order) and moral (for just order), against the machines? Yet, this is exactly what is proposed by the human-centric picture in which the law seems to be celebrated as an expression of (probably) inferior governance simply because it retains its human character. Like a see-saw, the dialectic between those who argue for respect for the law and those who are discontent will move up and down but, as the weight of discontent increases, we might come to think that the law to be respected by humans is after all the law of the machines; given time, even humans will come to realise

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45 Again, compare Hubert Etienne (n 38).

46 Hildebrandt (n 40), at 143.

47 Ibid., at e.g., 154-155.

48 Ibid., all at 12; and, see too the summary at 183-185.

that, relative to governance by humans, it is governance by machines that is better than the alternative.[49]

6. The Second Wave III: The New Debate

So, if our choice is between human-centric governance (with humans making their own decisions) and governance that is designed to ensure that humans come to no harm, then which version of governance should we choose, why so, and what price or risk might there be in making the choice?

First, which version should we choose? Should we choose imperfect self-governance by humans or more perfect governance for humans? If we choose the latter, it makes little sense to worry about authority and respect: the context is no longer one of trusting the judgments of other humans above one's own prudential or moral judgments; it is no longer a matter of deferring to the judgments of other humans. If we choose the former, we still have the traditional question to tackle. To be sure, we might think that we need to cut some more slack to individuals to follow their own prudential judgments or conscience. However, there is still a live question to be asked about why deference to the law should be the default.

Secondly, is there any reason why we should choose one rather than the other? For moralists, it might seem self-evident that there is no virtue in doing the right thing simply because this is indicated by smart machines or compelled by technological management. For moralists, the inclination might be towards the former version (the East coast). For prudentialists, the inclination might be towards the latter version (the West coast) but some might follow the moralists in thinking that it is important for humans to make their own prudential judgments. What we have here are different conceptions of our humanity and I see no compelling reason to say that one conception is better than the other.

Thirdly, although there might be no reason to prefer one conception over the other, human agents should never make choices that compromise the essential conditions for their existence and agency. So, whatever we choose we must not adopt a mode of governance that irreversibly compromises the conditions for our human social existence.[50]

Finally, to return to the nature of the second wave of disruption, we can detect three prongs of disruption. One is the disruption to the prudential case for deference to the Law. The relevant alternative to legal order is not now disorder, but a better technologically controlled regime of governance. The second prong is the disruption to the moral case for deference to the Law. The relevant alternative now is not an inferior order that does not aspire to be just, but a better form of governance by moral machines coupled with technological management. Thirdly, the opposition between the prudential and moral justifications for governance by legal rules is de-centred and disrupted. In place of this traditional opposition, we now have, on one side, advocacy in support of governance by rules (implicating a conception of human-centric governance) and, on the other side, advocacy in support of governance by machines (implicating a conception of human-protective governance). While the traditional jurisprudential question retains its vitality on one side of this new opposition, on the other, it

[49] Compare the drift of the discussion in Ryan Abbott, *The Reasonable Robot* (Cambridge University Press, 2020).

[50] For extended discussion of these conditions, see Roger Brownsword (n 37).

seems to be redundant. If this is correct, then we can already sense the nature and significance of the third disruptive wave.

7. The Third Wave of Disruption: An Agenda for Debate

As was indicated in the introductory remarks to this Working Paper, the second wave of disruption presages a third wave. The disruptive impact of this third wave is on a raft of concepts that are meaningful when the context is governance by humans and by rules but not so once the context is governance by technology—and, moreover, not so even though we might persist in trying to transplant the language of one context to the other.

In this Working Paper, I will simply sketch an agenda of questions that are prompted by the third wave of disruption.

First, how far do the conceptual ideas and the questions that accompany governance where humans are still the authors of regulatory measures remain meaningful once humans are out the regulatory loop? How far do the conceptual ideas and the questions that accompany governance where it is rules that are the instruments of choice remain meaningful once that context changes to governance by technologies?

Secondly, at what point should we say that governance is no longer an essentially human enterprise? How deep and how broad must be our reliance on machines and technologies? How difficult must it be to identify accountable humans? Should we treat governance as crossing from human to technological when this is recognised de jure or is de facto reliance (when there is no longer a willingness by human reviewers to override the decisions made by machines) sufficient?

Thirdly, is it helpful to try to transplant or to retain the language of authority, respect, trust, justice, and so on that is characteristic of human governance to governance by machines?

Fourthly, do we now face a Copernican revolution in our conceptual thinking, reworking the ideas that stand behind human-centric self-governance and, if so, where do we centre our thinking? For example, Ethan Katsh and Orna Rabinovich-Einy, having rightly observed that 'new forms of resolving and preventing disputes will move us even further away from the idea that the legal system is at the center of the dispute resolution solar system',[51] then say:

> Adopting technology in the courtroom opens up new opportunities not only for making our existing processes less expensive and cumbersome and more accessible at all hours. It could also change the very nature of court processes, with software playing an increasingly significant role in streamlining, resolving, and preventing claims. Indeed, there is promise for transforming our very understanding of the meaning of *justice*.[52]

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51 Ethan Katsh and Orna Rabinovich-Einy, *Digital Justice* (Oxford University Press, 2017) 20.

52 Ibid., at 164-165.

This prompts the response, though, that our sense of justice is not what needs to be transformed; for sure, unequal justice is not justice,[53] but it is our practice that needs to be transformed not the ideals to which we aspire.

Fifthly, should we now view law (qua governance by rules) as just one kind of patterned order? To be sure, an order that emerges from humans who are self-consciously following rules is a distinctive kind of order; and, as traditional jurisprudence emphasises, the internal attitude of those who are following the rules is distinctive.[54] Nevertheless, if the predictability of order is the key characteristic, then (given the unpredictability of human responses to rules) legal order is hardly the paradigm. Rather, the paradigm is technologically secured order.

Sixthly, although we have suspended doubts about the superior performance of machines and technological management, a significant number of humans surely will push-back against this kind of governance. They will contest the claim that machines do governance better than humans. Given such resistance, why should we assume that the third wave of disruption will take place? Perhaps, it will always remain on the horizon.

Finally, should our working assumption be that, in the bigger picture, most communities will adopt a mode of governance that relies on both humans and technologies? Indeed, this might appeal as the optimal mode of governance, a happy conjunction of humans and machines. In this picture, the outliers will be, at one end of the spectrum, the few communities that either reject governance by machines and hold on firmly to governance by humans and rules and, at the other end of the spectrum, the communities that embrace a brave new world of technological governance.

8. Concluding Remarks

There is no doubting that the prospect of efficient and effective governance by technology disrupts the traditional debate about the authority of law and respect for the law where the background choice is between more than one version of governance by rules. However, the precise nature and significance of the disruption invites further analysis.

If the choice between governance by rules and governance by machines is to be made on prudential grounds, the choice seems to be between imperfect order and perfect (or near perfect) order; and, if we are to push back against the latter it has to be on the apparently unpromising basis that we believe our self-interest (whether as an individual or as a member of the collective) is better served by imperfect order. If the choice is to be made on moral grounds, and if we are to push back against governance by technology it seems to be on the unpromising basis that we think that we do the right thing by backing our own moral judgments against the more perfectly realised moral order of the machines. In the end, what matters to humans with the capacity for agency is the process, not the product. How irrational, how typically human, technologists might reflect.

However, we might think that there is more to it than this. Governance by machines is not just another version of legal order demanding recognition of its authority and respect for its

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53 Compare Jerold S. Auerbach, *Unequal Justice* (Oxford University Press, 1976) at 12: ‘In the United States justice has been distributed according to race, ethnicity, and wealth rather than need. This is not equal justice.’

54 Classically, see Hart (n 20).

operation; it is not just another articulation of law to which prudential and moral reason is to be applied. Arguably, governance by machines is radically different to governance by humans; and technological management is radically different to governance by rules. The technological performance simply cannot be compared with the human performance. There might be some functional similarities but the performances are fundamentally different.[55] In that light, we come to see that a key feature of the traditional debate about the authority of, and respect for, the Law is that it is predicated on a context in which the enterprise of subjecting human conduct to the governance of rules is an essentially human enterprise that uses rules as its regulatory tools. Once we take humans and rules out of the picture, this is a very different context and, concomitantly, a very different debate. In this context, while we can still ask whether we should defer to the machines, arguably, it no longer makes sense to conceive of Law in terms of authority (this being characteristic of human relations) and respect (this being characteristic of situations in which the option of non-compliance is available).

We might also wonder whether the disruption goes even deeper, beyond the terms of the traditional debate, beyond our understanding of law as a human rule-based enterprise, reaching back to the context that supports the human capacity to make our own individual and collective judgments, whether guided by prudential reason or by moral reason. To be sure, if we commit to the authority of law and if we habitually respect it, we have put our prudential and moral trust in the law. In principle, we can recall questions for our own judgment and, as we have seen, that can be problematic. However, if we put our trust in governance by machines, recall might not be so easy. In dystopian scenarios, the machines might have other plans for humans;[56] and, even without dystopias, if governance by machines has disrupted the context in which humans develop their capacities for prudential and moral reason, the retrieval of governance by rules might not be so simple,

Finally, in what I have flagged up as the third disruptive wave, we have reason to wonder whether it is meaningful to question the authority of and respect for the law when the context is no longer one of governance by humans and rules. In the very different context of governance by technology, we might need to modify a broad sweep of our conceptual thinking. If we are reluctant to make such modification, then we need to resist the momentum behind governance by smart machines, lest we find ourselves irreversibly in a place that we humans do not want to be. In an ideal world, this would be the moment to take time out—time out to ask ourselves precisely that question: where do we want to be, what kind of information societies do we wish to inhabit, do we want a world of imperfect self-governance or a world of benign technological governance? Sadly, our information societies are not designed for moments of this kind.

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55 Compare Lyria Bennett Moses, ‘Not a Single Singularity’ in Simon Deakin and Christopher Markou (eds), *Is Law Computable?* (Hart, 2020) 205.

56 Nick Bostrom, *Superintelligence* (Oxford University Press, 2014).

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