Judges, Carpenters, and Computers: A Craft-Based Perspective on Judicial Decision-Making

Reuben Andrews

Reuben Andrews is a Law graduate from Fitzwilliam College, Cambridge, interested in employment law and social security law. In late 2021 he will begin a Bachelor of Civil Law degree at Lincoln College, Oxford. In his spare time he makes furniture from reclaimed materials.

Is a judge more like an artist or a scientist? This seems to be a trick question, and yet extreme versions of both perspectives have, at one time or another, been advocated. For instance, James Boyd White, often regarded as the founder of the 'Law and Literature' movement, considered lawyers to be artists, and the solving of complex legal problems to be akin to high art.[1] Conversely, Christopher Columbus Langdell, once Dean of Harvard Law School, believed that 'law is a science, and that all the available materials of that science are contained in printed books',[2] such that timeless and unchangeable legal principles could be inductively reasoned from the corpus of case law, thereafter providing definitive answers to any legal dispute.

Neither of these viewpoints has garnered widespread support. Nevertheless, the question is of more than purely academic interest: in light of the increasing presence of computation within the professional landscape of law it has a practical application.[3] If judicial decision-making is purely, or even predominantly, a science then it is highly susceptible to automation; on the other hand, if judicial decision-making is closer to an art-form, then it fails to be seen how artificial intelligence can effectively replicate it.

Instead, this article explores the alternative viewpoint that a judge is more appropriately regarded as a craftsperson, with legal judgments being craft-objects rather than 'high art' or scientific expositions. The first half of this article defends this view, whilst the second half applies it to the contemporary issue of AI (artificial intelligence) judges.

1 James Boyd White, *The Legal Imagination* (University of Chicago Press 1985) xxv.
2 Christopher Columbus Langdell (speech in London, 1886, published 1887) 3(1) Law Quarterly Review 123.
3 Basha Rubin, 'Is Law An Art Or A Science?: A Bit Of Both' (*Forbes*, 13 January 2015).

I. How is a judge like a carpenter?

In perhaps the most sustained comparison of law and craft,[4] Brett G. Scharffs identifies four ways in which the law overlaps with distinctive aspects of craftsmanship.[5] First, the products of craft are not mass-produced, but are instead 'hand-crafted' to particular briefs—similarly, legal judgments and advocacy are tailored towards specific cases.[6] Second, craft is medium-specific: just as carpenters are those who work with wood, legal practitioners are those who work with rhetoric and law.[7] Third, craft-objects have use-value which supersedes their aesthetic value; although legal judgments may be persuasive, and even artful in their concision and style,[8] their ultimate value is in resolving legal disputes by applying the relevant law to given fact scenarios.[9] Fourth, craft, as a practice, is defined by its strong relationship with tradition (as opposed to pursuing novelty), a characteristic that can be observed in common law jurisdictions, where the legal principle of stare decisis ('to stand by things decided') compels courts to abide by legal precedent.[10]

Collectively, these factors undermine the view that law is an art-form. Art is not medium-specific, as it can be sculptural, dramatic, visual, literary, and so on; in contrast, only a legal judgment or statute can be considered law. Similarly, art is not function-focussed

4 This is certainly not the only exploration of this topic. See: James R Elkins, 'Ethics: Professionalism, Craft, and Failure' (1985) 73(4) Kentucky Law Journal 937; Karl N Llewellyn, *The Common Law Tradition: Deciding Appeals* (Little, Brown and Company 1960) 214.
5 Brett G Scharffs, 'Law as Craft' (2001) 54(6) Vanderbilt Law Review 2247.
6 ibid 2284.
7 ibid 2276.
8 Austin Sarat, Matthew Anderson, and Catherine O Frank (eds), *Law and the Humanities: An Introduction* (Cambridge University Press 2010) 295.
9 Scharffs (n 5) 2303.
10 ibid 2278.

as, although certain works of art may perform certain functions (such as social commentary or entertainment), there is no specific or predetermined function which art, as a diverse human activity, must fulfil. Finally, whilst there are certainly artistic traditionalists, art is not solely a backwards-facing phenomenon, since, unlike law, it has no preconceived ties to liberal values like certainty and regularity, and so can permit (and celebrate) iconoclasm and radical experimentation.[11] As such, even though law-making can be seen as a creative act, the nature of its creativity is often counterposed to that of art-making: 'Law tells. Art shows. Law rationalizes. Art feels. Law renders definitude. Art explores infinity.'[12]

However, what is less easy to grasp from Scharffs' account is why law cannot be regarded as a science. Indeed, Scharffs admits that his overall thesis is unlikely to gain its strength from analytical reasoning, but rather from a 'moment of recognition or insight'[13] into the similarities between craft practices and law. As such, there are two main analytical hurdles to the view that law is a craft which deserves our attention. The first of these is that while judgment-writing displays characteristics of craftsmanship,[14] it might be argued that it is conceptually distinct from judicial *decision-making*, which remains akin to a science in its elaboration and application of objectively verifiable rules. In effect, the form of a legal judgment may be a product of craft—based on a need to persuade and justify—but the substance of that judgment isn't.

However, although this is an abstractly pleasing argument, it is unclear how exactly the form and substance of legal judgments can be so cleanly separated. For instance, Judge Richard Posner has described how judicial decision-making often takes place *simultaneously* with judgment writing, because the 'silent, incompletely verbalized thinking' that a judge has in regards to the outcome of a given case can easily be displaced when they have to justify that thinking in a structured piece of prose.[15] Perhaps the most obvious example of how the manner in which a judgment is written constrains the legal conclusions a judge is able to justify, lies in the way that a judge editorialises the facts of a case to produce a coherent (and convincing) narrative. Even appellate judges, who do not engage in findings of fact, are able to 'retell' the facts of a case in a manner which is 'determinative as well as descriptive.'[16]

Take, for instance, the criminal law case *R v Stone & Dobinson*.[17] There, the Court of Appeal upheld convictions for gross negligence manslaughter against John Stone and Gwendoline Dobinson after Fanny Stone, John's sister who was residing with them, succumbed to toxaemia from infected bed sores. A core plank of the Court of Appeal's reasoning was that the blood relationship between John and Fanny implied a duty of care between the two. It is striking then, when Lois Bibbings repeatedly refers to Fanny as John's 'lodger', rather than his sister, in the course of a fictitious dissenting judgment written after the case.[18] With the use of a single word, Bibbings highlights facts which were marginalised in the Court of Appeal's judgment—that Fanny paid rent and that despite her geographic proximity to John, she was socially estranged from him—to create an account which is no longer able to support the official conclusion. Neither judgment's narrative is necessarily 'truer' than the other, since both rely on subjective arguments about the social importance of familial bonds and of paying rent. Nevertheless, part of judicial craft is the ability to sculpt a coherent and convincing account out of events, like these, which admit multiple interpretations. The way in which such events are framed is inseparable both from the way in which the overall judgment is written, and from the legal outcome it is capable of building towards.

The second objection to the view that law is a form of craft can be derived from HLA Hart's distinction between so-called 'easy cases', which he argued can be resolved solely by reference to prior legal materials, and 'hard cases', where the law is equivocal in its application and judges must therefore use their discretion to determine its 'correct' application. The presence of 'hard cases', so the argument goes, does not prove that judicial discretion is essential to legal reasoning, because in such cases judges are applying social policy rather than law.[19]

There have traditionally been two ways to counter this argument: the first is to dispute that judges apply social policy in 'hard cases' by instead arguing that they invoke the legal principles which lie behind legal rules;[20] the second, which constitutes the approach this article will take, is to challenge the extent to which 'easy cases' exist in the manner presented. If no such cases exist, or if 'easy cases' only half-resemble Hart's suggestion, then the argument that only such cases constitute true applications of the law loses much of its bite—especially if we expect jurisprudence to shed light on the day-to-day practices and expressions of judges, rather than postulate abstracted theories which dismiss them.[21]

In an attempt to flesh out how the distinction operates in practice, Neil MacCormick defined 'easy cases' as those cases whose outcome can be fully justified according to modus ponens (if 'p' fact scenario, then 'q' legal remedy).[22] This, he argued, is a process of pure deduction which considers only the facts of the case and any relevant legal rules, nothing else. The problem with this definition, however, is that in order to argue that a case can be resolved in this manner, one must first be confident that there are no meaningful counter-interpretations of the law in question—otherwise judicial discretion would be necessary to determine the correct interpretation. However, this is not a logical conclusion that can be deductively reasoned from the wording of the relevant law alone: it necessarily involves judicial reflection on the purpose and meaning of that

11 Wendy N Duong, 'Law is Law and Art is Art and Shall the Two Ever Meet? Law and Literature: The Comparative Process' (2005) 15(1) Southern California Interdisciplinary Law Journal 2.

12 ibid 22.

13 Scharffs (n 5) 2279.

14 This is hardly a controversial point—for instance, Lord Hope regards judgment-writing as 'an art, not a science', using the term 'art' in a way quite compatible with this article's understanding of craft: David Hope, 'Writing Judgments' (Judicial Studies Board Annual Lecture, 16 March 2005) <https://webarchive.nationalarchives.gov.uk/20131203083017/http://www.judiciary.gov.uk/Resources/JCO/Documents/Speeches/Lord_Hope_of_Craighead_Annual_Lecture.pdf> accessed 4 March 2021.

15 Richard A Posner, 'Judges' Writing Styles (And Do They Matter?)' (1995) 62(4) University of Chicago Law Review 1421, 1447–48.

16 Erika Rackley, 'The Art and Craft of Writing Judgments: Notes on the Feminist Judgments Project' in Rosemary Hunter, Clare McGlynn, and Erika Rackley (eds), *Feminist Judgments: From Theory to Practice* (Hart Publishing 2010) 46.

17 *R v Stone and Dobinson* [1977] 1 QB 354.

18 Lois Bibbings, 'R v Stone & Dobinson: Judgment' in Rosemary Hunter, Clare McGlynn, and Erika Rackley (eds), *Feminist Judgments: From Theory to Practice* (Hart Publishing 2010) 234.

19 HLA Hart, *The Concept of Law* (Oxford University Press 1997) 153.

20 Ronald Dworkin, *Law's Empire* (Fontana Press 1986) ch 7.

21 Nigel E Simmonds, *Law as a Moral Idea* (Oxford University Press 2015) 20–1. See also, Dworkin's objection that Hart's argument treats judges as either liars or 'simpletons' who do not understand the 'true' nature of law: Dworkin (n 20) 41.

22 Neil MacCormick, *Legal Reasoning and Legal Theory* (Oxford University Press 1978) 19–23.

law.[23] In effect, whether or not a case is 'easy' or 'hard' is closer to a value judgment than a fact.[24]

In making a similar point, Lon Fuller argued that judicial reflexivity is largely implicit in many legal judgments, not because judges are not considering the purpose of the law, but because they are relying on preexisting assumptions they have made regarding the purpose of that law.[25] Jonathan Crowe builds on the work of social psychologists like Daniel Kahneman to expand this point: he argues that since practical decision-making begins with intuitive judgments that do not strictly involve the application of rules, but are instead 'holistic' in their combination of descriptive and normative considerations,[26] the 'heuristics [that judges] use to form holistic judgments will reflect their legal training and experience in the courtroom',[27] such that both rule-based *and* contextual factors will be considered at the moment of intuition.[28] 'Easy cases', he argues, are better defined as those cases where a judge's initial intuitions, after reflection, map onto settled understandings of the purpose and application of the relevant law.[29]

As such, on neither a logical nor a psychological level is legal reasoning reducible to mere rule-application. All cases implicate a judge's 'creativity', both in requiring the construction of a narrative (implicit or explicit) and in a contextual understanding of how the law relates to that narrative—even those cases which seem, on their face, easily resolvable. In much the same way, craft practice 'involves both rules and theory, but cannot be completely expressed in terms of either.'[30] It requires a bounded form of creativity—deferent to rules but sensitive to the need to adapt such rules to unforeseen briefs. This sets law apart from both art and science, aligning it with craft.

II. AI judges

If a judge is a craftsperson, then they are unique in one obvious way: a person's liberty does not usually rest in the hands of a potter, or a carpenter. Although comparisons between the rise of automation within the legal profession and the demise of craft guilds may seem pompous,[31] they underline a fundamental worry that some human practices are incapable of being adequately replicated by machines. These worries are neatly encapsulated by the following quote from technology scholar James Bridle: 'computation at every scale is a cognitive hack, offloading both the decision process and the responsibility onto a machine.'[32] Whatever the justification proposed for greater automation within the legal world—reduction of bias, increased courthouse efficiency, and so on—it is undeniable that the primary function of AI judges is to delegate decision-making processes to machines and in doing so responsibility will necessarily be delegated also. Both forms of delegation are worth discussing in relation to craft.

On the first point, few people argue that artificial intelligence should completely replace human decision-making in judicial environments. However, even modest proposals for AI's place in judicial decision-making can become doubtful in practice, given the 'rule-guided' (as opposed to 'rule-governed') nature of legal reasoning. For example, when 52 programmers were asked to create a computer program which could determine if individual drivers from a dataset had violated the speed limit, the final programs out-put *significantly* different results, ranging from no violations in the whole set to at least one violation per driver.[33] Although the traffic law was a strict liability offence, and thus did not consider subjective factors like the defendant's mental state, it nevertheless resisted mechanical enforcement: for instance, the law gave no guidance on what to do if someone exceeded the speed limit for a minuscule amount of time, or whether going above and then dropping below the limit multiple times in a single driving session counted as multiple offences.

This study does not prove that all laws are necessarily underdetermined, or that AI is incapable of enforcing laws—rather, it suggests that even laws which appear conducive to binary application[34] are unlikely to have been designed with machinic enforcement in mind.[35] Many laws, especially criminal offences, straddle a number of sometimes conflicting aims—in this case, deterrence, retributivism and revenue generation—such that their application across different fact scenarios necessarily invokes judicial craft both in understanding these aims and how they intersect, and in ascertaining which aim is appropriate to prioritise in a given circumstance.[36] The question is not whether humans can devise a computer program to choose between these aims—the aforementioned study proved that 52 programmers *could* do it—rather, whether any computer program, even those that occasionally produce palatable answers, could do so in a way that is responsive to context and consistently justified.[37] Although it can be countered that human judges may also lack completely coherent theories of the areas of law on which they adjudicate, 'in people, bad theory can be tempered by unarticulated knowledge … A sense of what is fair and reasonable is [something] that programs lack.'[38]

This human aspect of reasoning is highly relevant when it comes to responsibility. Although craft-objects derive much value from their utility, historically, they have also been valued for their ability to embody human connection.[39] However, unlike with other crafts, human input within judicial decision-making is often obscured. For

23 Robert Alexy, *A Theory of Legal Argumentation: The Theory of Rational Discourse as Theory of Legal Justification* (Clarendon 1989) 8.
24 Something MacCormick himself partly acknowledged: MacCormick (n 22) 230.
25 Lon L Fuller, 'Positivism and Fidelity to Law: A Reply to Professor Hart' (1958) 71(4) Harvard Law Review 630, 630 and 663.
26 Jonathan Crowe, 'Not-So-Easy Cases' (2019) 40(1) Statute Law Review 75, 75 and 78.
27 ibid 79.
28 Note the similarity to Judge Posner's argument about the connection between judgment writing and judicial decision-making.
29 Crowe (n 26) 79.
30 Scharffs (n 5) 2324.
31 ibid 2260.
32 James Bridle, *New Dark Age: Technology and the End of the Future* (Verso 2018) 43.
33 Lisa A Shay, Woodrow Hartzog, John Nelson, and Gregory Conti, 'Do Robots Dream of Electric Laws? An Experiment in the Law as an Algorithm' in Ryan Calo, A Michael Froomkin, and Ian Kerr (eds), *Robot Law* (Edward Elgar Publishing 2016) 291.
34 In other words, a defendant either did or did not break the speed limit.
35 Shay, Hartzog, Nelson, and Conti (n 33) 297.
36 Consider also Criminal Justice Act 2003 s 142, which requires criminal judges to consider a range of purposes of sentencing, including retributivism, deterrence, incapacitation, rehabilitation, and restorative justice.
37 Note also that the overwhelming majority of programmers from the study concluded that they would not want to be governed by their own system: Shay, Hartzog, Nelson, and Conti (n 33) 292.
38 Anne von der Lieth Gardner, *An Artificial Intelligence Approach to Legal Reasoning* (MIT Press 1987) 84.
39 '[The notion] that handcrafted objects contain some piece of the person who made them has long been a part of how we understand craftsmanship': Christine Harold, *Things Worth Keeping: The Value of Attachment in a Disposable World* (Minnesota University Press 2020) 172.

instance, Robert Ferguson highlights the 'rhetoric of inevitability'[40]—the common practice of writing judgments as if their outcome is simply the 'correct course in history'.[41] This obscurantism stems partly from the constitutionally precarious position of judges as non-democratically elected officials, and partly from pervasive ideas about the nature of law as something which can be reduced, at least in certain cases, to the observance of clear-cut rules. A danger of AI judges, then, is that in a profession which already faces strong pressure to assert the truth of its decisions, the use of computation could enshrine decision-making under a veneer of objectivity.[42]

And yet, although the idea that legally incorrect or contestable judgments made by AI judges may come to be seen as 'inevitable' is certainly worrisome (especially because AI can easily perpetuate the same biases as humans),[43] there is a deeper problem here. In denying parties to a legal case the opportunity to have their dispute dealt with by a human judge, AI judges also deny them the dignity of being heard by an entity capable of both empathy and accountability. Part of the significance of having one's case heard by a human judge is that humans are capable of appreciating the consequences which flow from their decisions. This is not the same as saying that judges should be emotionally pressured to misapply the law, but rather that their application of the law in the face of difficult and complicated circumstances should, in theory, humanise the process (especially when judges craft their judgments in apologetic or sensitive ways), thus making the process feel fair and justified. AI judges cannot justify their decisions because they cannot think—they merely follow their coding.

Neither of these criticisms are meant to argue that AI judges are necessarily a doomed project.[44] However, by applying a craft-based perspective of judicial decision-making to the topic of AI judges, certain risks make themselves clear. With the COVID-19 pandemic exacerbating pre-existing court backlogs around the globe, there are calls to use AI to quickly resolve cases which supposedly pose lesser impact on defendants' lives—such as small claims and motoring offences.[45] However, what these calls ignore is how destabilising even a small fine can be to certain people's lives. A human judge would have the ability to understand such ramifications in context; a human judge would feel (*and would be*) responsible for their part in making these decisions.

40 Robert A Ferguson, 'The Judicial Opinion as Literary Genre' (1990) 2(1) Yale Journal of Law and the Humanities 201, 213.

41 ibid 214.

42 Indeed, automation bias—the human tendency to over-value information produced by computers—is an increasingly prevalent phenomenon in modern governance: Bridle (n 32) 40.

43 Consider the now famous COMPAS algorithm, used by American judges to assist in sentencing, and its purported replication of racial biases.

44 For instance, some of these criticisms of AI reasoning only apply to rule-based approaches to AI judges, and not to the more contemporary machine-learning approaches.

45 Nancy Siboe, 'Use of Artificial Intelligence by the Judiciary in the Face of COVID-19' (*Oxford Human Rights Hub*, 9 April 2020) <https://ohrh.law.ox.ac.uk/use-of-artificial-intelligence-by-the-judiciary-in-the-face-of-covid-19/> accessed 27 February 2021.