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BOOK REVIEW:

LITIGATING ARTIFICIAL INTELLIGENCE BY JESSE BEATSON, GERALD CHAN, AND JILL R. PRESSER.¹

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I. INTRODUCTION

It is no longer news that artificial intelligence (AI) is being deployed across the board in the legal industry, although the extent of AI use varies by jurisdiction. This incidence of *robot lawyers*,³ *robot judges*,⁴ *robot administrators* and predictive legal tools powered by AI perhaps reflects a grim future for legal professionals,⁵ or will at the very least, radically change certain aspects of legal practice that legal practitioners must brace for. The story goes like this – ‘the legal profession’s digital-era journey is accelerating’,⁶ and the introduction of AI into everyday life is reshaping extant legal assumptions and creating complex litigation frontiers. In any case, the legal industry is undergoing a paradigm shift that requires new questions and answers. The very sophisticated character of AI tools with disruptive capacities requires a rethink of orthodox praxis, norms, jurisprudence, and assumptions. This is precisely what the book *Litigating Artificial Intelligence* has demonstrated quite well. The book provides a very nuanced compilation of timely discourse on AI in the legal industry, contextually elucidating emerging issues and contestations that legal professionals will grapple with now and going forward. This comprehensive book provides practitioner and scholarly perspectives on the intersectionality of AI and Law from a

¹ Jesse Beatson, Gerald Chan and Jill R Presser, *Litigating Artificial Intelligence* (Canada: Emond Montgomery Publications Limited, 2021).

² Assistant Professor, Lincoln Alexander School of Law of Toronto Metropolitan University, Canada.

³ See Shannon Liao, “‘World’s First Robot Lawyer’ Now Available in All 50 States” (November 9, 2023) The Verge, online: <<https://www.theverge.com/2017/7/12/15960080/chatbot-ai-legaldonotpay-us-uk>>.

⁴ News surfaced in 2019 that Estonia, a European country was developing a robot judge for small claims litigation; Joshua Park, “Your Honor, AI” (November 9, 2023) Harvard International Review, online: <<https://hir.harvard.edu/your-honor-ai/>>.

⁵ Dom Galeon, “A New Kind of Judge? AI Lawyer Correctly Predicts Outcomes of Human Rights Cases: Reading the letter of the law quite accurately” (November 9, 2023) Futurism, online: <<https://futurism.com/a-new-kind-of-judge-ai-lawyer-correctly-predicts-outcomes-of-human-rights-cases/>>.

⁶ Beatson, Chan and Presser, *supra* note 1 at 8.

Canadian perspective, as many other Canadian legal scholars are increasingly engaging in this complex terrain.⁷

One strength of the book is that it brings together highly seasoned legal scholars and practitioners to grapple with the ensuing quandaries. The book is divided into six parts. The first part (Part I: Introduction) summates the four overarching and interconnected themes of the remaining parts of the book, namely, Part II: AI as Decision-Maker, Part III: AI and Evidence Law, Part IV: AI as the Subject Matter of a Lawsuit, Part V: AI-Enabled Litigation Tools and Part VII concludes the book. Each part takes on several issues, such as: the use of AI in criminal decision-making; AI and administrative decision-making; evidence curated using AI by litigators; the legal liability of AI technologies; and validation and vetting of AI litigation tools. Although the chapters speak to each other to some degree by provoking a pocket of related issues, appraising the book as a whole may result to a flat descriptive overview that leaves out essential reflections.

Without being too simplistic, the book's discourse can be narrowed to how lawyers can navigate the legal nuances introduced by AI systems. For example, when AI becomes a subject of litigation in civil or criminal claims, and when AI are used to augment or complement existing practices that fundamentally impact the landscape of legal activities. Although these challenges continue to arise, with very few litigated scenarios in Canada and a lack of a definite regulatory framework, the authors positioned lawyers as part of the solution. They suggest that lawyers must ask new questions and help fill regulatory gaps, using litigation as a viable tool.⁸

In appraising the book, this review focuses on the use of AI in the criminal law context of policing, trial, and corrections. AI in criminal justice is proliferating across all stages of the justice process, with more examples of automated tools being introduced in criminal justice processes. Generally, most legal scholarship in this area has been on algorithmic risk assessment tools in bail and sentencing. However, examples of the use of assistive automated sentencing decision technologies have also drawn lots of attention (including from democratic jurisdictions in the

⁷ See Florian Martin-Bariteau and Teresa Scassa, *Artificial Intelligence and the Law in Canada* (Toronto: LexisNexis Canada, 2021); Michael Purcell and Mathew Zaia, "Prediction, Prevention and Proof: Artificial Intelligence and Peace Bonds in Canada" (2020) 98 *The Canadian Bar Review* 523; Daniel Konifkoff and Akwasi Owusu-Bempah, "Big Data and Criminal Justice-What Canadians Should Know" (2019) *Institiut Broadent Institute* 3; Kaitlynd Hiller, "Predictive Policing and the Charter" (2021) 44:6 *Manitoba Law Journal* 244; Dennis D Draeger, "Justice Trends 2: Automated Justice, Get the Gist of the Future of Technology Justice" (2018) *Department of Justice* 1-22.

⁸ Beatson, Chan and Presser, *supra* note 1 at 14.

global South, e.g., Malaysia⁹). This review will focus on the authors' assessment of the uses of algorithmic risk assessment tools in bail and sentencing predictions, probabilistic genotyping tools, and predictive policing technology and how these tools may raise Canadian Charter considerations that Canadian lawyers must prepare for.

II. THE USE OF ALGORITHMIC RISK ASSESSMENT TOOLS IN BAIL AND SENTENCING PREDICTIONS

The description of what constitutes an “algorithmic risk assessment tool” can be somewhat unclear since the book primarily distinguishes “algorithmic risk assessment tools” from “non-algorithmic risk assessment tools”.¹⁰ In general, the distinction often lies in the method by which these tools process information and provide assessments. For example, algorithmic risk assessment tools typically involve processing large volumes of data using statistical, machine learning, or AI algorithms to identify patterns and make predictions. They usually apply the same set of rules for consistency (compared to human judgment). Non-algorithmic risk assessment tools often involve human judgment with decisions based on human experience, intuition, or reasoning rather than through automated processes. Scholars have not yet formulated a definite nomenclature for risk prediction tools in bail and sentencing. Despite this, the authors' choice of distinction may be argued to be projecting an elevated view of “algorithms” (especially if the term in its simple form describes traditional or actuarial risk assessment tools that may not be sophisticated, like COMPAS,¹¹ etc.). Perhaps a better description may be to describe them as “AI-powered risk assessment tools”. This observation does not strike the following core arguments proposed by the authors, but a further refined definition of algorithmic risk assessment might be worth consideration.

Algorithmic risk assessment tools in bail and sentencing generate estimates about the likelihood of an individual's recidivism by processing and analyzing datasets composed of

⁹ Dennis W K Khong and Chiung Ching Ho, “Artificial Intelligence in Malaysian Courts: PP v Denis P Modili” (2022) 2:2 Asian Journal of Law and Policy 127 at 127-128; Rina Chandran, “As Malaysia tests AI court sentencing, some lawyers fear for justice” (November 9, 2023) BusinessWorld, online: <<https://www.bworldonline.com/world/2022/04/12/441948/as-malaysia-tests-ai-court-sentencing-some-lawyers-fear-for-justice/>>; China is the leading user of assistive automated sentencing technology.

¹⁰ Beatson, Chan and Presser, *supra* note 1 at 72.

¹¹ Correctional Offender Management Profiling for Alternative Sanctions (COMPAS). See Arthur Rizer, “Artificial Intelligence and Risk Assessment Tools: Problems and Solutions” (2020-2021) 60 Washburn LJ 495; Bejarano Carbo and Maria Patricia, “Machine learning applications in the United States criminal justice system: A critical content analysis of the COMPAS recidivism risk assessment” (2021) Charles University: Faculty of Social Sciences 1.

historical bulk policing data, such as data sets about past arrests, charges, and convictions in the population. As noted by the authors, examples of these kinds of systems are prevalent in the US and UK, with projections that they will likely be introduced into the Canadian criminal justice system. There is no record that they have been deployed in Canada to date. However, introducing them demands caution, especially as reports emerge from other jurisdictions that the systems can be racially prejudicial towards minority groups.¹²

The authors discussed various legal issues litigators must consider, many of which concern Canadian Charter interests. Data sits at the heart of AI development and operation, and the systems' output depends on reliability, representativeness, robustness, etc.¹³ That aside, the problem of opacity and propriety interest raises a pocket of Canadian Charter concerns.

For instance, the authors identified *Section 11(e)* of the Canadian Charter and *Section 518(1) of the Criminal Code* as a starting point for litigators to consider as touching the key organizing principles governing pre-trial release and detention in bail proceedings.¹⁴ They argued that with AI, the debate is not about the position of the law versus the prediction tool but whether the supposed benefits of prediction tools outweigh the costs and potential complications that might arise regarding their reliability and impact on proceedings. The authors suggested that courts exercise discretion by excluding evidence from AI tools for risk prediction as these AI systems are generally unreliable and prejudicial to the essence of bail proceedings. Similarly, the authors posited that relevant algorithmic outputs which translate as evidence should be admitted as “computer-generated expert opinion evidence” to subject it to the *Mohan* framework.¹⁵ If the

¹² Michael Conklin and Jun Wu, “Justice by Algorithm: Are Artificial Intelligence Risk Assessment Tools Biased Against Minorities?” (2022) 16:2 *SJ Pol'y & Just.* 1; Sean Alan Hill II, “Bail reform and the (false) racial promise of algorithmic risk assessment” (2021) 68 *UCLA L. Rev.* 910.; Doaa Abu Elyounes, “Bail or jail? Judicial versus algorithmic decision-making in the pretrial system” (2019) 21 *CoLuM. Sci. & TECH. L. Rev.* 376.

¹³ Beatson, Chan and Presser, *supra* note 1 at 76.

¹⁴ *Canadian Charter of Rights and Freedoms* s 11(e), Part 1 of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (UK), c 11 guarantees the right not to be denied reasonable bail without just cause: “Any person charged with an offence has the right not to be denied reasonable bail without just cause” (*Canadian Charter of Rights and Freedoms*). And then, *Criminal Code*, RSC, 1985, s 518(1) stipulates the evidence that can be considered by the court when determining whether an accused should be released on bail or detained in custody.

¹⁵ The *Mohan* framework is a set of criteria established by the Supreme Court of Canada in the landmark case *R v Mohan* [1994] 2 SCR 9 to ascertain the admissibility of expert testimony in court. The four principal criteria include relevance, necessity in assisting the trier of fact, absence of any exclusionary rule, and the requirement that a suitably qualified expert provide the evidence. These guidelines ensure that expert evidence presented is pertinent and informative beyond the common knowledge of the judge or jury but also that it is not overly prejudicial or detrimental to the trial's integrity.

outcome would be admitted and credited to the defendant, one proposal is that AI algorithmic outputs should only be used when it generates low-risk profiles.¹⁶

Because there is less urgency in sentencing than bail, applying algorithmic tools poses a distinct set of issues when considering the sentencing proceedings and the latitude granted to judges under the Criminal Code and Canadian Charter. However, the judges' scope of consideration and available remedies should not be curtailed. The defendant's ability to answer and present a defence should also not be curtailed. Due process guarantees under the Canadian Charter and the Criminal Code that protect the right to challenge and access evidence by the defendant will prove difficult due to the technicality (or opacity) of algorithms, the cost associated with review, and commercial propriety interests. The remedy as argued by the authors is for the defence lawyer to argue for the exclusion of such evidence based on Canadian Charter infractions. The same line of arguments above applies to risk assessment tools for sentencing which lawyers must consider.

One constraint to algorithmic risk assessment tools which the authors did not fully consider is the Canadian individuality jurisprudence which distinguishes Canada from other jurisdictions. The *Gladue* case (and many other precedents that follow it) have underscored the individuality of approach that sentencing judges must consider when computing just and proportionate sentencing.¹⁷ This requirement may not be achievable by algorithmic tools because the risk outcome of the system is likely to be based on comparing the defendant's data to the aggregate of others, when perhaps the judge should instead principally focus on the offender. Moreover, the Supreme Court of Canada recently stated in *R v Bissonnette*,¹⁸ "[t]here is no mathematical formula for determining what constitutes a just and appropriate sentence...".¹⁹ Using an aggregated

¹⁶ Gideon Christian, "Legal Framework for the Use of Artificial Intelligence (AI) Technology in the Canadian Criminal Justice System" (Law and Technology Institute Conference: From Inequality to Justice, Schulich School of Law, Dalhousie University, Halifax, 16 June 2023) [unpublished].

¹⁷ *R. v. Gladue* (1999) 1 SCR 688. The decision in the Gladue case was the first to address the implications of *Section 718.2(e)* of the Criminal Code and led to the establishment of what is known as Gladue principles. These principles require judges to consider the unique circumstances and experiences of Indigenous peoples in Canada, such as the impact of colonialism, displacement, and residential schools. This approach is intended to address the systemic issues contributing to the overrepresentation of Indigenous individuals in the criminal justice system and to encourage sentencing options that can better serve the process of rehabilitation and community integration. The Gladue ruling also introduced the Gladue report, a type of pre-sentencing or bail hearing report specifically designed to provide courts with detailed information about the life circumstances of Indigenous individuals who are being sentenced. These reports help to inform the application of Gladue principles in sentencing decisions.

¹⁸ (2022) SCC 23.

¹⁹ *Ibid.*

mathematical formula to produce risk factors would therefore be contrary to understanding how sentencing should be done.

III. PREDICTIVE POLICING TECHNOLOGY

Predictive policing technologies have been deployed in Canada. As noted by the authors, such tools enable law enforcement to carry out surveillance on a mass scale or predict hotspots for potential criminal activity.²⁰ Using such tools in consideration of their risks and critiques (such as the potential to perpetuate data bias, covert investigatory privilege, lack of transparency, and inherent unreliability of the technology) raises concerns under ss 7, 8, 9, and 14 of the Canadian Charter.²¹ The authors observed there is a likelihood that people, who may not have fallen under the police's radar, could be captured with attendant consequences where these tools are adopted, leading to unlawful detentions. The right to not be deprived of liberty under the Canadian Charter will likely be tested. Canadian courts have also condemned profiling as grounds for reasonable suspicion of wrongdoing.²² Consequently, general predictions from predictive policing tools may not suffice as grounds for arrest or detention.

The authors also discussed privacy concerns regarding how investigative data is collected.²³ They noted that privacy considerations should be examined by the potential use of the data and what information the data reveals. This is because data collected systematically, including open-source information or the aggregation of data points using algorithmic surveillance techniques, can be significantly revealing to infringe upon citizens' expectation of privacy and anonymity. Data sourced from the private sector or social services and shared with law enforcement raises additional privacy issues which indicate the presence (or absence) of authorizations for collecting and transferring such data. These partnerships between law enforcement and the private sector may affect public trust in such institutions and deter those in need from accessing the services they need for fear of profiling.

²⁰ Beatson, Chan and Presser, *supra* note 1 at 158.

²¹ *Canadian Charter of Rights and Freedoms*, *supra* note 14 at ss 7, 8, 9, and 14 protect various civil liberties considered fundamental in Canadian society. These sections collectively ensure the rights related to legal, due process, personal liberty, fairness in the judicial process, and the protection of individuals in their interactions with the state, particularly in the context of law enforcement and the justice system.

²² Beatson, Chan and Presser, *supra* note 1 at 166-168.

²³ *Ibid* at 171-170.

To counterbalance these privacy issues, data could be sourced publicly from social media, biometrics, geolocation, and communications from building these tools for training of predictive policing AI systems. These data sources are easily obtainable and do not require consent or knowledge of the data subjects. Yet, this data collection approach has a long-term chilling effect on exercising human rights in digital spaces. If people knew their online interactions could be used to profile or monitor them, greater caution and self-censorship might become the order of the day. Predictive policing tools may also be built by using existing data in law enforcement custody, such as CCTV footage. However, such data usage also raises red flags regarding privacy and the sensitivity of the information extrapolated from such sources. It is trite that such tools may be biased against some groups. The authors consequently recommend the use of litigation to challenge unregulated data collection without judicial oversight and proposed litigators should argue for judicial oversight(s) based upon s 8 Canadian Charter rights.²⁴

IV. PROBABILISTIC GENOTYPING

Probabilistic genotyping tools are another domain that has probably witnessed the adoption of algorithmic tools at a higher pace in Canada. This partly involves using AI algorithms to analyze complex DNA samples that traditional methods cannot resolve. Such tools can help in interpreting mixed DNA samples collected during criminal investigations. For example, by applying statistics and computational methods, these tools can provide estimates of the probability a particular individual's DNA is present in a sample, enabling more nuanced and scientifically grounded evidence to be presented in court.²⁵ However, the challenge with them is the “black box problem” (i.e., the lack of transparency on how some complex machine learning algorithms make decisions or derive insights), making it difficult to reach informed conclusions. The conclusion may be consequently inaccurate and cause grave injustices when relied on by courts. To avert this the authors recommended that litigators insist on proprietary disclosure and explainability, and where appropriate, challenge the admissibility of evidence derived from such tools.²⁶

²⁴ *Ibid* at 178.

²⁵ ‘AI Case Study: Probabilistic Genotyping DNA Tools Used in Canadian Courts’ (2020) Law Commission of Ontario, online: <<https://www.lco-cdo.org/en/our-current-projects/ai-adm-and-the-justice-system/ai-case-study-pg/>>.

²⁶ Beatson, Chan and Presser, *supra* note 1 152-155.

In advising litigators to challenge evidence derived from probabilistic genotyping tools, the authors reaffirmed the aim is not to discount the importance of DNA evidence in the criminal justice system. However, the authors explored how there is a world of difference methodologically between conventional DNA evidence and what probabilistic tools offer. The former produces profile probability based on a single and fine DNA sample. Traditional DNA profiling techniques, when properly done, can be solid proof. On the contrary, probabilistic genotyping tools usually test DNA probability by comparing two hypotheses by relying on an algorithmic assessment of complicated DNA samples; as such, they are challenging to understand and arguably unreliable.²⁷ There has been litigation related to traditional probabilistic tools, and they have mostly concurred that concerns about such tools go to the weight of the evidence produced, not its admissibility.²⁸ The authors proposed that litigators may challenge the admissibility of probabilistic genotyping tools in court by drawing out the difference between this tool and the classic DNA sequencing approaches.²⁹ Arguably, there is ingenuity in the proposition made by the authors as there is a safety net in excluding such evidence upfront rather than admitting them and leaving the jury to determine probative weight. Educating the jury through limiting instructions may be helpful, yet, the jury may tacitly give an undeserved weight to the evidence but make it look less noticeable by spreading it across other admitted evidence.

V. CONCLUSION

In the book “Litigating AI,” the authors comprehensively addressed the multifaceted role of AI in legal settings by emphasizing its ubiquitous integration into various sectors. They convincingly argued for the inevitable adoption of AI tools, highlighting the current embryonic state of its regulatory framework. Through effective litigation, they proposed the existing gaps in AI governance could be temporarily bridged to foster ethical development which is respectful of rights. The book advocated for proactive engagement by legal professionals to reconcile the use, development, and deployment of AI with entrenched legal principles, making it an essential read for global practitioners and anyone invested in the legal ramifications of the technology’s evolution. A follow-up publication to update the book and address ongoing advancements would

²⁷ *Ibid* at 137-141.

²⁸ *R. v. Gabriel*, 2014 QCCS 2129 (CanLII); *R. v. Eatman*, 1999 CanLII 9452 (NB CA).

²⁹ Beatson, Chan and Presser, *supra* note 1 at 145-146.

be pertinent. A follow-up would allow the authors to revisit their original arguments in light of new challenges and legal precedents that have emerged since the book's initial publication. It would also enable them to provide fresh insights into how AI systems integration into legal settings has evolved and how legal professionals can effectively respond to the latest developments. By continually assessing and analyzing the impact of AI systems on the law, the authors can offer practitioners and scholars some updated guidance on navigating this complex and dynamic field, ensuring that the conversation around AI and the law remains current and relevant.