

Artificial Intelligence Ethics and International Law

Practical approaches to AI governance

2nd Edition

Abhivardhan



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Dedicated to

My mother

My father

and

The most beloved,

Team ISAIL

&

Indic Pacific

Foreword



Professor Andy Pardoe

Chair Deep Tech Innovation Centre University of Warwick

In the 21st century, we find ourselves at the intersection of two transformative forces that are reshaping the world as we know it: Artificial Intelligence and the field of law. The convergence of these two domains has given rise to a fascinating and dynamic field with profound implications for society, technology, and the legal landscape. It is my distinct pleasure to introduce this thought-provoking and insightful book, a comprehensive exploration of the complex relationship between AI and the legal world.

The emergence of artificial intelligence has brought about a paradigm shift across various sectors, offering unprecedented opportunities and challenges. In the realm of law, AI is revolutionizing how legal professionals conduct research, manage cases, draft documents, predict outcomes, and even assist in legal decision-making. At the same time, it poses critical questions surrounding ethics, accountability, transparency, and privacy. This book delves deep into these issues, providing readers with a nuanced understanding of the evolving landscape between AI and the legal industry.

Over the last few years, we have seen the remarkable progress that AI has made in its ability to process vast volumes of data, recognize patterns, and make predictions with a degree of accuracy that was previously unimaginable. AI-powered legal tools can analyse contracts, extract essential information, and assess compliance, all in a fraction of the time it would take a human attorney. Moreover, AI algorithms can sift through enormous datasets to uncover hidden insights and precedents, thereby assisting in legal research.

However, as the power of AI in the legal domain becomes increasingly evident, so do the challenges it poses. The author has taken a holistic approach, addressing the multifaceted issues surrounding AI in the legal profession. They tackle the ethical considerations related to AI's decision-making processes and its potential for bias, and they delve into the essential question of how to establish accountability when AI systems are involved

in legal matters. Furthermore, the book explores the nuances of data privacy and human autonomy in the context of AI ethics.

The interdisciplinary nature of AI and law makes it a subject of profound relevance, not only to lawyers and legal scholars but to technologists, policymakers, ethicists, and society at large. It is imperative that these disciplines come together to deliberate on the implications, potentials, and limits of AI in the legal field.

This book stands as an invaluable resource for anyone interested in this dynamic and evolving field. Through meticulous research, deep expertise, and forward-thinking insights, this text provides an essential guide to understanding the intricacies of AI in the legal world.

In conclusion, the convergence of AI and law is an unstoppable force, reshaping the way we practice and perceive law. As we continue to navigate this frontier, we must remain informed, ethically grounded, and committed to harnessing the full potential of AI while mitigating its risks.

Foreword



Sanjay Notani

Partner

Economic Laws Practice

In an age where technology continuously reshapes our understanding of the world, this book stands as an emblematic exploration of the multifaceted interplay between emerging AI technologies and the foundational tenets of global legal frameworks.

The advent of Artificial Intelligence has been remarkable. As AI systems edge closer to achieving the state of the ‘theory of mind’, we are compelled to grapple with profound challenges. AI anthropomorphism—the inherent human-like nature ascribed to AI systems—introduces nuanced dimensions to concepts of content and identity, compelling us to reckon with the implications of machines making decisions reminiscent of human cognition.

The evolution of AI, as the opening chapter illustrates, isn’t simply a technical marvel; it raises questions about the very structure and applicability of our legal systems. Can AI truly grasp and mold legal taxonomies? How do we navigate the maze of biases, data quality issues, and the inherent unpredictability of machine learning? The parallels drawn between the common law system and machine learning techniques illustrate the deep-rooted structural challenges in assimilating AI into our legal frameworks.

The discussion on AI’s intertwining with international law goes beyond the superficial. It delves into how AI interacts with seminal concepts like human autonomy and the privacy doctrine, casting light on the intrinsic and instrumental legal issues concerning AI technologies. The narrative draws from rich historical and philosophical insights—from Aristotle’s foundational views on ethics to Descartes’ musings on automata—to dissect AI’s potential and perils in the legal sphere.

Furthermore, the exploration of human rights within the book holds pertinence. At a juncture where international law is grappling with the increasing influence of technology, understanding the potential human-centric implications of AI becomes paramount. Issues ranging from data specificity and quality to the complexities of AI auditing and explainability are adeptly analysed, grounding the discourse in the practical realities of our times.

In essence, this book isn't merely a discourse on AI and international law; it is a timely reflection on the broader ethical, philosophical, and practical dimensions of AI's growing presence in our global society. As we stand at the crossroads of unprecedented technological innovation and legal evolution, "Artificial Intelligence and International Law" offers readers both a mirror to our present and a lens into our future.

Testimonials

I have read several publications relating to Artificial Intelligence (AI), but I must recognize that none is anywhere near this book authored by Abhivardhan, in so far as intellectual understanding of AI is concerned. The instant published work is so enlightening, practical, and reasoned that it becomes a must-read for all.

Hemant Batra

*Corporate & Public Policy Lawyer & Founder, MentorTalk™
Sr Legal Consultant & Lead (New Ventures & Growth),
Shardul Amarchand Mangaldas
Elected Vice President, SAARCLAW
(SAARC Regional Apex Body - Inter-Governmental)*

This book is a comprehensive and insightful guide to the complex intersection of AI and international law. One of the things that sets this book apart from other books on AI and law is its focus on the Indian and Global perspective. Abhivardhan discusses the different ways in which AI is being regulated and proliferated around the world and the challenges that need to be addressed in order to ensure that AI is used in a responsible and ethical manner. It is a must-read for lawyers, policymakers, and anyone else interested in the future of AI.

Ish Jain

*FCI Arb, FHKI Arb, FMI Arb, FAMINZ,
CIA (AiADR), FPD, SFBiam, FIDRC, MICA
Senior Partner, Regius Legal LLP
Arbitrator and Mediator*

The book, *AI and International Law*, 2nd Edition is a comprehensive and detailed work that brings perspectives from a multi- disciplinary and multi- faceted approach of the benefits as well as the challenges posed in regulating artificial intelligence. The deep inquiries undertaken in the work shows the commendable efforts of the author in showcasing the realities as well as the possibilities of governance of artificial intelligence in international law. This is a must have book for law, policy and tech professionals.

Manohar Samal

*Senior Associate, Ratan Samal & Associates
Arbitrator, Asia Pacific Centre for Arbitration and Mediation & the
Indian Institute of Arbitration and Mediation*

An essential read packed with insight and knowledge on the subject. An authoritative text! A must for anyone interested in the subject!

Rodney D Ryder

Founding Partner, Scriboard

About the Author

Abhivardhan is honoured to serve as the Chairperson and Managing Trustee of the Indian Society of Artificial Intelligence and Law and as the Managing Partner at Indic Pacific Legal Research. Throughout his journey, he has gained valuable experience in international technology law, corporate innovation, global governance, and cultural intelligence.

With deep respect for the field, Abhivardhan has been fortunate to contribute to esteemed law, technology, and policy magazines and blogs including *The Daily Guardian*, *The Contemporary Law Forum*, *India Business Law Journal*, and others. His book, “*Artificial Intelligence Ethics and International Law: An Introduction*” (2019), modestly represents his exploration of the important connection between artificial intelligence and ethical considerations with an international law perspective. Emphasizing the significance of an **Indic approach to AI Ethics**, Abhivardhan aims to bring diverse perspectives to the table.

Abhivardhan remains humbled by the opportunity to share knowledge through various papers on international technology law. Alongside his consulting and policy advocacy, he has been involved in both authoring and editing books, focusing on public international law and its relationship with artificial intelligence.

Maintaining a down-to-earth approach, Abhivardhan’s speaking and research interests revolve around Indo-Pacific affairs, disruptive technology ethics and policies, artificial intelligence governance, Indo-European culture and music, global governance, sustainable development, digital connectivity, and public international law.

About the Reviewer

Manohar Samal MCIArb is a Senior Associate at Ratan Samal and Associates, Mumbai and an Arbitrator at the Asia Pacific Centre for Arbitration and Mediation. He specializes in tax, customs, and securities litigation along with commercial arbitration of technology transfer, banking and construction disputes. He has more than 70 publications under his belt, spanning from Government funded technical reports, SCOPUS indexed journal papers, blogs and law magazine articles.

Acknowledgement

The second edition of this book has brought its own share of delight. In reality, I feel grateful to present another edition of this comprehensive book on artificial intelligence and law after the pandemic. I extend my gratitude to my *parents* and my colleagues at *Indic Pacific Legal Research* and the *Indian Society of Artificial Intelligence and Law*. I also acknowledge and appreciate the long-running technical editing process for this book and express my gratitude to the diligent team at **BPB**.

My special regards go to **Akash Manwani**, a talented expert in AI and Law, and the *Chief Innovation Consultant* at the *Indian Society of Artificial Intelligence and Law*, **Abhishek Jain**, former *Chief Managing Editor* of the *Indian Journal of Artificial Intelligence and Law*, **Bhavana J Sekhar**, *Principal Researcher*, and **Sanad Arora**, *Senior Research Associate* at *Indic Pacific*. I am grateful for the *forewords* authored by Mr. **Sanjay Notani** and Dr. **Andy Pardoe**, as well as the *editorial reviews* for this book written by legal luminaries such as Mr. **Hemant Batra**, Mr. **Ish Jain**, Mr. **Manohar Samal** and Mr. **Rodney D. Ryder**.

I also express my gratitude to my dearest friends, **Vaibhav Dwivedi**, **Vignaesh B, Vedant Sinha** and **Pratejas Tomar**. Their moral support has been invaluable during the pandemic, in some of the toughest times.

Preface

Technology defines the course and growth of human civilization. It rekindles and rhymes historical trends and patterns, including the confluence of myths and facts. My interest in mathematics and the concept of gravity, was since my childhood and teenage days. I have been fond of reading and hearing folklores and stories related to the cyclicity of time, the geodic shape of planet Earth, the water cycle and many other fascinating natural truths, in the multicultural, diverse and colourful Indic fold, which is observable in any region, city and even village, in India. That indeed enriched my curiosity further to pursue law as a field in social sciences, considering the analytical skeleton of the field, and its far-reaching effects in any average society. As I had started pursuing bachelor's in law, I became increasingly interested in the concept of privacy, in jurisprudence. Since then, I have been interested in semantics and the literature of English as well as Indic languages, I have authored 4 collections of poems in Hindi and English in total, since my teenage years. I still remember writing an article for the *Philosophical Quarterly* on **Intentional Action**, long before my board examinations, just out of my curiosity in *Shrimad Bhagavad Gita* and our Itihasas, especially the *Mahabharat*. Perhaps when I had joined law school, that fervent interest in technology law and international affairs, blossomed at its very best.

My encounter with the field had begun due to my curiosity in metaphysics and Freudian psychodynamics, which led me further to read about the concept of human agency, with both Indian and European contexts. It turned out that the Indian and European aspects share a profound semblance of astute respect and concern for coherent and rules-based systems. The European philosophical fold dominated its discourse on why the individual must have privacy, while the Indian fold, emphasized on a duty-based relationship between the individual and the collective, which further made me interested to author a short work on the concept of Privacy, from the perspective of a "pseudo-contract". That indeed led me to emphasize on the field of technological history, and so artificial intelligence. Scholars such as *Nassim Nicholas Taleb*, *Sanjeev Sanyal*, *Dr Jeffrey Funk*, *Mariana Mazzucato*, *Friedrich Hayek*, *Dr S Jaishankar*, *Karl Popper*, *Elon Musk* and *Ludwig von Mises* have inspired my thoughts on innovation along with various other Indian and European artistes and authors.

My perspective of technology, in a purely genealogical manner, does not limit up to the finite definitions of information technology. I have been fascinated by technology distancing, which further encouraged me to understand artificial intelligence as an ethical concept, as well as a kind of technology. I realized that in the domain of artificial intelligence ethics, there should be an India-centric global approach, due to which I founded the Indian

Society of Artificial Intelligence and Law, which is not-for-profit industry body, pioneering in advocating for issues related to artificial intelligence ethics & law, including gradual artificial intelligence standardisation.

My research interests have remained in fields like international technology law, global governance, civilization science, public international law, conflict economy, policy dynamics, ethics of artificial intelligence & international affairs. I have published various legal as well as policy-related papers, articles and reports, in technology law (especially artificial intelligence ethics and law). I have been an editorial board member of a few publications, and have also started 2 online law journals, *Indic Journal of International Law* [e-ISSN: 2582-8398] & *Indian Journal of Artificial Intelligence and Law* [e-ISSN: 2582-6999], and 1 online law-policy magazine, *The Indian Learning* [e-ISSN: 2582-5631]. Perhaps, all of that meant something in the long run, when it all started with that one article I had authored for *Philosophical Quarterly*, delving into questions of metaphysics and the philosophy of destiny.

My realization to delve into technology law stems from my interest in global governance as well. Global issues require three levels of introspection – *local*, *national* and *international*. Technology dynamics show how the global nature of the rules-based international order is deterministic and evolves regularly. The evolution does not stop, nor can be stopped, since the determinism exists in every sphere of international relations, law and social sciences, starting from the *realpolitik* itself. My approach towards international law and relations has been a relative coalescence of passive multilateralism and active plurilateralism, where particularisms of countries, and their actors define issues of global importance, including human rights.

As far as academics is concerned, I am of a clear view that erudition and salience in learning and research contributes productively, in the scholarly development of the academic fields. Technology law is an emerging and perennially evolving field, and my fascination with the ethics of artificial intelligence, has been no less of a journey. The book's second edition encompasses a wider and evolved perspective of artificial intelligence and international law. Since the book's first edition that had come in 2019, the developments in the artificial intelligence industry have been humongous, and far-reaching. In 2018, one could not imagine governments coming up with AI regulation, when I had started writing this book.

Now, the debate has evolved to issues beyond the "black box" problem and Responsible AI. The Generative AI industry (or a sub-segment) itself has been a key driver to shape regulatory tendencies among governments across the world to come up with some legal stance on artificial intelligence technologies. The second edition of this book, unfolds with a focus on the intricate landscape of **Artificial Intelligence (AI)** and its intersection with international law.

SECTION 1: Introduction

Chapter 1: Artificial Intelligence and International Law – This chapter initiates this exploration by delving into the complexities of understanding AI, employing legal linguistics to interpret disruptive technologies, and envisioning a perspective beyond the traditional frameworks of Law 1.0 and 2.0.

SECTION 2: Technology Governance

Chapter 2: Pragmatism in Governing AI – This chapter delves into the pragmatic aspects of governing AI within the international legal arena. It dissects the workflow of international law, acknowledges its limitations, and scrutinizes sovereignty in the context of international cyber law. The chapter further explores various shades of multilateral governance and introduces classification methods such as Concept-Entity-Industry and Subject-Object-Third Party.

Chapter 3: The Innovation and Economics of AI – This chapter shifts the focus to the innovation and economics of AI. It examines the weaponization of data and algorithms, providing insights into the real-world implications of the pervasive AI hype. This exploration sets the stage for understanding the economic dynamics and innovative dimensions within the AI landscape.

SECTION 3: Classification and Recognition of Artificial Intelligence

Chapter 4: Legal Visibility - Legal visibility takes center stage in this chapter, where the concept is defined and its recognition in common law systems is explored. The Tegmark Approach to AI ethics, the realm of dimensional perpetuity, digital identity in AI and international law, and the impact of data quality and privacy on AI recognition are intricately discussed.

Chapter 5: The Privacy Doctrine – In this chapter, the linear approach of human rights is scrutinized, along with the challenges associated with reactionary legal thinking. The Privacy Doctrine itself is outlined, offering a unique approach to international privacy law, while considering sovereignty and natural morality in the era of Industry 4.0.

Chapter 6: The ISAIL Classifications of Artificial Intelligence -This chapter introduces ISAIL Classifications of AI. It discusses the recognition of the legal-ontological status to examine artificial intelligence per se and provides detailed insights into Concept-Entity-Industry and Subject-Object-Third Party classifications, along with the doctrine of manifest availability.

SECTION 4: Artificial Intelligence in a Multi-polar World

Chapter 7: AGI and Digital Colonialism – In this chapter AGI and Digital Colonialism is introduced, where the multi-polar world is explained, and the evolution from Narrow AI to AGI is examined. The chapter also explores how Digital Colonialism shapes AI ethics norms, touching on factors such as ideology, technology and economics, and evaluates the limits of responsible AI. Stages of the Hype Cycle through risk determination are also detailed.

Chapter 8: Self-Regulating the Future of AI – This chapter addresses the self-regulation of AI's future. It explores generative AI applications, delves into responsible and economic innovations, examines India's role in shaping global technology norms, and offers soft law recommendations for the future of AI. This comprehensive exploration culminates in a holistic understanding of the diverse facets and implications of AI within the framework of international law.

In this book, I have expanded on the recent legal scholarship on artificial intelligence governance, proposed some questions on its economic drivers, and how these developments are shaping up the future of AI regulation. For sure, artificial intelligence is far-reaching and impactful. However, cutting down on the hype behind markets promoting AI tools, is also a concern for governments. This is where artificial intelligence hype comes in, which I have covered in this book as well. In short, this book kind of reflects my 5-year career in the AI industry as a technology lawyer and entrepreneur. You can also consider this to be my AI and law *“memoir”* if anything like that may exist.

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SECTION 1:
Introduction

CHAPTER 1

Artificial Intelligence and International Law

यत्र धर्मस्तत्र कृषिः, यत्र कृषिस्तत्र धर्मः।
यत्र धर्मकृषिभ्योऽन्यो, द्वयं तत्र न विद्यते॥

*“Where there is righteousness, there is growth;
where there is growth, there is righteousness.*

*Where righteousness and growth are not separate from each other,
that harmony prevails.”*

The advent of **Artificial Intelligence (AI)** has been an interesting journey. Many consider that AI may take a big leap from being mere a knowledge machine to a more mature and explainable entity. The problems however would not end even when developers and scientists would be able to develop Artificial Intelligence systems by achieving the state of the Theory of Mind. History gives us an opportunity to look at how the anatomy of Artificial Intelligence has evolved with time, howsoever timid or limited that could be. That anatomy could also be referred to as AI anthropomorphism, which means actions of the AI system would obviously be attributed to human realities, actions, and biases. In that case, content (or information as known) and identity (natural, human, animal, or any) become relatively affected by the operations and activities of the AI system. This could be related with what *Stuart Russell* had stated:

*“Humans are defenseless in information environments that are grossly corrupted”
(itut, 2017).*

However, the story of AI for a law *de lege ferenda* – **the law that is to be brought about in future** – is not as simple as it seems.

Before even considering questions of bias and data quality, it would be interesting to ask if Artificial Intelligence, would be able to understand and shape legal taxonomies and jargons. From a semantics point-of-view, applications based on **Large Language Models (LLMs)** such as ChatGPT significantly attempt to replicate legal language when it comes to normal tasks such as drafting and paraphrasing. The AI systems enabling these use cases may or may not be equipped to explain how their algorithms make decisions. In that case, it would be interesting to notice how it could be possible for companies to develop these stable and viable AI use cases. If an AI system meets industry and regulatory standards for explainability, it can explain how decisions are made at the level of the algorithms that drive the system. In many ways, this could be understood as something relatable to human decision-making and autonomy in legal systems. To understand this relatability, let us draw a parallel between the common law system and Machine Learning techniques.

Now, the common law system, which is applicable in many countries including India, relies on this idea to shape and relearn from society and provide insights on legal issues. The authority of the courts is to declare law. It gives the administrative systems a chance to shape the corollaries of the legal system as disruptive technologies become mainstream with time. However, once it is understood how AI would be adapted in proportions in the legal system, then it is reasonable to infer that the common law system, like any other legal system needs to understand and adopt Artificial Intelligence quite cautiously. There are many layers of substantive and procedural law issues respectively, which need to be settled and made clear, as courts and systems would adapt Artificial Intelligence technologies and consequently adjudicate their legal implications.

Now, incorporating Artificial Intelligence into the understanding of law has become possible even if it is not very enhanced or evolved yet. In fact, as of the early 2020s, the field of Artificial Intelligence and law does not limit its scope to data laws, regulations, orders,

and other legal instruments. It is nowadays connoted with poignant issues of human development and autonomy, which within the understanding of human rights could also be related to social welfare issues in public law. The big tech companies have been viewed with concern by governments around the world, which has further perpetuated the need to develop sustainable **Digital Public Infrastructure (DPIs)** and other relevant solutions. Infamously, a TED Talk by *Zeynep Tufekci*, an ardent critic and techno-sociologist in the 2010s had inspired a human-centric discourse on technology ethics (*TED, 2017*), which remains valuable. Here is an excerpt from the talk, on how algorithms can be used to create ‘**persuasion architectures**’ to build AI-enabled social media applications.

In the digital world, though, persuasion architectures can be built at the scale of billions, and they can target, infer, understand and be deployed at individuals one by one by figuring out your weaknesses, and they can be sent to everyone’s phone private screen, so it’s not visible to us. And that’s different. And that’s just one of the basic things that Artificial Intelligence can do (TED, 2017).

Now, it could be argued that this need to preserve human development and autonomy could be traced to an understanding of the rules-based international order, which is easily explained by the Status of South-West Africa case of the 1950s, in the International Court of Justice.

[The] way in which international law borrows from this source is not by means of importing private law institutions “lock, stock and barrel” ready-made and fully equipped with a set of rules. It would be difficult to reconcile such a process with the application “the general principles of law.” (International Court of Justice, 1950)

Now, let us get back to AI again. What drives AI at a basic level is based on how it analyzes data (and information). Data reception is the key to making AI workable. What data has to be analyzed and interpreted to produce results, definitely is a basic concern. Data quality, therefore, becomes an matter of concern. It is also about how the Machine Learning system works, makes itself more prone to reception. But how does that reception work, and how does the AI system produce output, matters. This is where the concept of **Responsible AI**, becomes important. It enables one to analyze the responsibility of the companies, their researchers, their business models, technology sovereignty issues and regulatory concerns. This book thus covers the material and immaterial (mostly, digital) aspect of AI and explores how in an emerging international world, it is shaping realities. In the next section, I have addressed how complex it gets to understand the role of Artificial Intelligence per se.

The complexity in understanding AI

Is the nature of AI too difficult to be understood in a legal sense? Let us now dive into the philosophical aspects of AI ethics, especially technology ethics, for starters. There are reasons why it is needed to focus on the ethical implications of the use of a digital technology, like Artificial Intelligence, blockchain, or any other class of technology. In