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Edited by Shin-yi Peng , Ching-Fu Lin , Thomas Streinz
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Artificial Intelligence and International Economic Law

A Research and Policy Agenda

Shin-yi Peng, Ching-Fu Lin, and Thomas Streinz

I INTRODUCTION

By approaching the complex set of phenomena the term "artificial intelligence" (AI) encapsulates from the vantage point of international economic law (IEL), we aim to advance the discourse surrounding the ways in which the development and use of AI transform economies, societies, and (geo)politics. We raise what we regard as important but also daunting questions regarding how IEL might, for better or worse, shape these developments – while being transformed itself in the process, both substantively and practically.

These questions include foundational clarifications about the nature, scope, and transformative potential of AI. In this context, it is essential to distinguish not only between different kinds of AI – ultimately an underspecified umbrella term – but also between what already exists, what is yet to come, and what might only materialize in the distant future (if ever). Moreover, even within (relatively) clearly defined forms or fields of existing AI, there is considerable variation in the methods and technologies used. For these reasons, the traditional lawyerly task of "defining AI" is caught between the Scylla of variety and specificity and the Charybdis of vagueness and expansiveness, which may jeopardize (if not eliminate) practical usefulness. In other words, while it is certainly possible to define AI as a field of inquiry or as an umbrella term for algorithms and robots with certain functionalities, comprehensive legal analysis requires a careful dissection of AI's constitutive parts and its applications. AI technologies constitute complex socio-technical systems involving humans, machines, algorithms, and data, and their deployment raises legal questions across a wide range of domains, including but not limited to data protection and privacy law, antidiscrimination law, intellectual property law, and tort law.

As the chapters in this volume illustrate, IEL speaks to various aspects of AI development, deployment, and use, as well as their corresponding regulation. In this chapter, we introduce three cross-cutting themes that illustrate the relationship between AI and IEL: disruption, regulation, and reconfiguration.

We begin by exploring the theme of continuity and *disruption*: we trace contemporary AI's foundational ideas back to the 1950s and explain how a combination of exponential growth in datafication and computing power enabled a certain AI technology – machine learning (ML) via "deep" neural networks (deep learning) – to advance in largely unexpected, and hence sometimes disruptive, ways since the mid-2000s. Contemporary ML's dependence on large datasets is but one illustration of how AI is generally intertwined with the digital transformation of the economy. While some of these transformations contribute to long standing goals of IEL, others stretch and potentially disrupt certain assumptions, under which IEL has developed since the creation of the General Agreement on Tariffs and Trade (GATT) in 1947 and the founding of the World Trade Organization (WTO) in 1995.

We then turn to the important theme of AI *regulation*, or indeed the absence thereof. The deployment of digital technologies, including AI-powered applications, has effects that can themselves be understood as regulatory in nature, as they enable certain activities (but not others), shape and condition human behavior, and expand and (re)allocate wealth and resources. They may also empower or diminish people. Growing concerns about the adverse impact of AI technology, especially with regard to patterns of inequality, exclusion, and outright discrimination, have led to a plethora of initiatives that seek to regulate AI technology through often overlapping but ultimately rather vague value sets (often emphasizing human-centered design and fundamental principles of ethics). These initiatives aspire to have a transformative effect on the technological development and societal deployment of AI, which is fundamentally driven by the academic-industrial complex and in significant part regulated by various, often transnational, standard-setting bodies. Governments have only slowly begun to confront AI-enabled transformations through legislative and regulatory action, with the European Union (EU) emerging as the most aggressive AI regulator. IEL provides a (meta)regulatory framework that aspires to govern these regulatory initiatives. Yet IEL's traditional focus on state-led regulation and its preference for multilateralism pose particular challenges in this regard.

All of these developments raise the question of IEL's ongoing and future *reconfiguration*. Several traditional domains of IEL, especially its multilateral trade dispute settlement system and the largely bilateral albeit widespread web of investor–state dispute settlement mechanisms, have been under pressure to reform and adapt. Major geopolitical shifts, most notably the rise of China, have called into question the WTO's relevance, as well as its capacity to sustain a quasi-universal multilateral trading system and prevent the "decoupling" of major trading blocs. The digital transformation of the global economy, which is in significant part influenced by the development and deployment of AI, adds further pressure to reconfigure the procedural, substantive, and enforcement aspects of IEL. Ultimately, AI technologies could be deployed to reconfigure the practice of IEL itself. Along these lines, we assess the extent to which IEL has already been reconfigured and explore the need for further reconfiguration.

In the following, we expand on the three themes of disruption, regulation, and reconfiguration that permeate the volume. Ultimately, this book seeks to engineer a broader discourse around AI and IEL as a field of scholarly inquiry and technologically informed legal practice. To this end, we conclude this introduction by bringing the contributions we assembled in this volume into conversation with one another and identify topics that warrant further research.

II THE (RE)EMERGENCE OF ARTIFICIAL INTELLIGENCE AND THE TRANSFORMATION OF THE GLOBAL ECONOMY

AI is often grouped together with other "disruptive" technologies, as Clayton Christensen's influential theory of innovation has entered the mainstream.[1] In this section, we explore the theme of disruption with regard to AI along three dimensions: first, we show how, *technologically*, the emergence of contemporary AI demonstrates remarkable continuity with ideas from the 1950s that only came to fruition after the 2000s because of exponential increases in computing power and the availability of large datasets. Second, we explain how, *economically*, AI, in combination with other digital technologies, is gradually but significantly transforming the global economy. Third, we show how these transformations lead to *legal* disruptions of longstanding assumptions and conceptualizations on which IEL has come to rely. This trifecta of AI-related technological, economic, and legal change is not a force of nature but is, rather, the result of human ingenuity in pursuit of innovation, efficiency, and profit maximization.[2]

A *Artificial Intelligence's Technological Development*

As we noted earlier, the term "artificial intelligence" is difficult to neatly define for legal purposes.[3] The term is being used in various interdisciplinary research communities encompassing computer and data science, philosophy and ethics, as well as the study of human and machine minds by psychology, cognitive science, and neuroscience. Even within computer science, definitions and related aspirations for AI differ.[4] The term's invention is usually credited to John McCarthy and his

[1] CM Christensen, *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail* (Boston, Harvard Business School Press, 1997). For a sharp critique of the use of the term in the tech discourse see A Daub, "The Disruption Con: Why Big Tech's Favourite Buzzword Is Nonsense" (*The Guardian*, 24 September 2020), https://perma.cc/92VM-WM58.

[2] This is not to say that these are the only objectives that could or should be pursued; see, for example, the innovation-skeptical account by L Vinsel and AL Russell, *The Innovation Delusion: How Our Obsession with the New Has Disrupted the Work That Matters Most* (New York, Currency, 2020).

[3] See also the chapter by Mercurio and Yu in this volume (Chapter 7), which uses the definition adopted by the World Intellectual Property Organization (WIPO).

[4] "Artificial Intelligence and Life in 2030: One Hundred Year Study on Artificial Intelligence – Report of the 2015 Study Panel" (2016), https://ai100.stanford.edu, at 12 (claiming that the "lack of a precise,

collaborators, who convened the legendary 1956 workshop at Dartmouth to investigate "the conjecture that every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it."[5] This definition still encapsulates the field of AI research today.[6] It also identified human intelligence as the relevant benchmark against which developments of artificial or machine intelligence are to be assessed. One well-known, albeit reductive, instantiation of this idea is the Turing test.[7] Inversely, the AI effect denotes the phenomenon that once machines have mastered a task that used to be accomplished exclusively by humans, the task itself is no longer deemed to require "intelligence."[8] Another paradox is that what is easy for humans is often hard for machines.[9] Increasingly, however, human intelligence is being displaced as the relevant benchmark for what counts as "intelligence."[10]

In any case, humans are not merely a baseline by which to assess advances in AI. They also make decisions about how AI is developed and deployed at every point along the way. Mentioning this fact may seem trite, but it appears to be necessary in light of the frequent confusion between the (limited) autonomy of AI applications on the one hand and the essential roles that (largely) autonomous humans play in AI development and deployment on the other. This includes the human labor-intensive tasks of data preparation and model selection and training.[11]

AI development is a complex process, with humans, machines, algorithms, and data serving as its key components (see Figure 1.1). AI problem domains range from perception, reasoning, knowledge-generation, and planning to communication. The AI paradigms invoked to tackle these challenges include logic- and knowledge-based modeling (where human rationales and expertise are turned into code), statistical methods (including traditional probabilistic methods, now encompassed by "data science"), and subsymbolic systems that venture toward distributed and evolutionary AI.[12]

The most important AI technology today is deep learning, a machine learning technique based on neural networks of several ("deep") layers (hence "deep"

universally accepted definition of AI probably has helped the field to grow, blossom, and advance at an ever-accelerating pace").

5 J McCarthy et al., "A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence" (31 May 1955), reprinted in (2006) 27 *AI Magazine* 12, at 12.

6 An excellent introduction to contemporary AI and its history is provided by M Mitchell, *Artificial Intelligence: A Guide for Thinking Humans* (London, Picador, 2019).

7 AP Saygin et al., "Turing Test: 50 Years Later" (2000) 10 *Minds and Machines* 463.

8 D Hofstadter, *Gödel, Escher, Bach: An Eternal Golden Braid* (New York, Basic Books, 1979), at 609 (allegedly misquoting Larry Tesler, who said: "Intelligence is whatever *machines* haven't done yet," with emphasis added to highlight the divergence).

9 M Minsky, *The Society of Mind* (New York, Simon and Schuster, 1986), at 29.

10 S Dick, "Artificial Intelligence" (2019) 1.1 *Harvard Data Science Review*.

11 D Lehr and P Ohm, "Playing with the Data: What Legal Scholars Should Learn About Machine Learning" (2017) 51 *UC Davis Law Review* 653.

12 See the helpful visualization in F Corea, *An Introduction to Data: Everything You Need to Know About AI, Big Data and Data Science* (Cham, Springer, 2019), at 26.

learning).[13] The basic idea behind this kind of ML dates back to the 1960s: deep neural networks simulate the processes through which neurons in the human brain make determinations about the world. It is ultimately a process of pattern recognition on the basis of large datasets. Initial enthusiasm for the idea dissipated, as alternative routes of AI development seemed more promising until the 1990s. It was only after sufficiently large datasets became available after the 2000s and the computing power necessary to compute these amounts of data was readily available that deep learning finally took off. Achievements that had been presumed to be out of reach in the near future became possible within surprisingly short timeframes.

AlphaGo's stunning success against one of the world's leading Go players, Lee Sedol, was enabled by deep learning, which trained the algorithms toward maximizing win probability and produced a nonhuman move that stunned Go experts.[14] Its later iteration, AlphaZero, was trained entirely by playing against itself and mastered the games of Go, chess, and shogi.[15] In addition, the prospect of autonomous driving vehicles has attracted significant attention. The Defense Advanced Research Projects Agency (DARPA), the US defense research organization also responsible for funding the Internet's foundational technology, launched its "Grand Challenge" for self-driving vehicles in 2004. The goal was to travel 150 miles through the Mojave Desert but no car reached the finish line, with the furthest advancing vehicle getting stuck after traversing less than eight miles. One year later, this marker was surpassed by all but one of the twenty-three finalists, and five cars completed the full distance of 132 miles. Suddenly, the prospect of (more or less) autonomous vehicles seemed to become a more near-term possibility – with implications for both AI regulation and IEL.[16]

The remarkable progress made by AI technology over the course of the last two decades notwithstanding, contemporary AI technology's significant limitations must not be ignored. In this regard, one can distinguish between tasks that AI is not able to perform at all and tasks that AI is supposedly able to do but that are executed poorly and with adverse effects, potentially causing harm to humans. The latter is an issue that we will address further later when we discuss the relevance of IEL to AI regulation, including AI regulation meant to guard against AI-caused harms. The former deserves clarification at this point: AI remains far from what has been termed "artificial general intelligence" (AGI); that is, the ability to perform the human-like functions of reasoning, knowledge-generation, and planning *generally*.

[13] I Goodfellow et al., *Deep Learning* (Cambridge, MA, MIT Press, 2016); TJ Sejnowski, *The Deep Learning Revolution* (Cambridge, MA, MIT Press, 2018).

[14] Contrast IBM's "Deep Blue" victory against chess world champion Gary Kasparov in 1998, which symbolizes the achievements of AI in the pre-deep learning era but also indicates its limitations: the machine had to use its vast resources to analyze human-played matches in real time to calculate the best move.

[15] David Silver et al., "A General Reinforcement Learning Algorithm That Masters Chess, Shogi, and Go Through Self-Play" (2018) 362 *Science* 1140.

[16] See the chapters in this volume by Peng (Chapter 6) and Lin (Chapter 12).

Contemporary AI remains largely limited to *discrete tasks* for which the algorithms have been trained with large datasets. Nondiscrete tasks, or tasks for which no reliable datasets exist, are beyond the ambit of contemporary AI technology. Companies that claim otherwise are often in the business of selling AI snake oil.[17] These limitations notwithstanding, the impact of AI technology on the global economy, to which we next turn, is already tangible and is likely to increase over the course of the next decade.

B *Artificial Intelligence and the Digital Transformation of the Global Economy*

As we have seen, the resurgence of AI and its transformative potential are intertwined with other technological developments in the global economy, most notably digitalization, computation, and interconnectedness, the latter of which is made possible by the Internet. AI relies on these foundational technologies of the digital era and coexists in synergy with other advanced digital technologies. For these reasons, our volume does not address AI in isolation but, rather, considers AI in the context of other transformative digital technologies, most notably "big data," cloud computing, the Internet of Things (IoT), and new forms of robotics.

Big data is often used quasi-synonymously with AI, but it is worth distinguishing between the two concepts to understand their respective impact on the global economy. Big data denotes the generation and analysis of datasets whose quantity surpasses human comprehension – only through machine-provided computing power can the available data be "mined" and insight gleaned from it.[18] However, the fact that because of its large quantity, big data cannot be analyzed by humans without help from machines in itself does not justify its designation as a form of (human-comparable) "intelligence." It is only when data analysis resorts to ML methods through which the algorithms themselves detect those patterns that justify a certain conclusion or prediction that it is appropriate to refer to AI. Contemporary data science teaches the statistical foundations of data analytics (including Bayesian networks) but increasingly includes and trends toward the use of ML to glean insights from data. Both technologies are dependent on large quantities of data, thereby transforming data into an important yet contested resource in the AI economy.[19]

The data on which both big data analytics and AI rely flow through the interconnected networks that constitute the Internet. Cloud computing builds on this

[17] A Narayanan, "How to Recognize AI Snake Oil" (Arthur Miller lecture on science and ethics, Massachusetts Institute of Technology, 18 November 2019), www.cs.princeton.edu/~arvindn/talks.

[18] V Mayer-Schönberger and K Cukier, *Big Data: A Revolution That Will Transform How We Live, Work, and Think* (London, John Murray, 2014).

[19] See the chapter in this volume on regulating data as a resource under IEL by Streinz (Chapter 9); see also Zufall and Zingg's chapter (Chapter 11) on data portability as a way to reallocate data.

underlying infrastructure and makes data storage and processing capabilities available at a distance ("infrastructure as a service," or IaaS). AI development is increasingly reliant on and in symbiosis with cloud computing. As part of their "platform as a service" (PaaS) business, cloud providers offer virtual AI development environments that integrate access to large datasets and libraries of algorithms. AI-enabled services, for example the translation of text or the transcription of audio recordings, can be offered on a cloud basis ("software as a service," or SaaS).[20]

Another evolution of the Internet – the IoT – also has AI-related implications. IoT denotes the Internet-enabled connectivity installed in objects (things) that previously did not possess the capability to interconnect and communicate with other objects or, indeed, humans. The Internet-enabled fridge is the stereotypical example, and a wide range of household items are expected to become equipped with internetworking ability. However, the IoT extends far beyond the household and features important industry applications as it enables interconnected machines (e.g., for farming) to operate in sync. Complex systems of this kind may rely on AI for management. Moreover, the interconnected objects that constitute the IoT are also often equipped with sensors used for data gathering, thereby expanding the volumes of data on which contemporary AI/ML relies. To the extent that IoT devices feature sufficient computing power, they may also be used to (re)train AI algorithms with local data in a decentralized fashion, thereby reducing the reliance on (centralized) cloud computing.

It is a mistake to believe that AI or other digital technologies occupy a virtual space detached from the physical world. To the contrary, all digital technologies are in various ways reliant on and intertwined with the physical world – for example, through the data centers where the data is stored, as well as the subsea cables through which most transnational Internet traffic flows.[21] AI-enabled services can be delivered online, including transnationally. But AI can also enable physical objects to perform certain functions locally.[22] These configurations are often called "robots": while public imagination remains captivated by human-like (humanoid) robots that seek to combine a human appearance with human-like capabilities, most robots are industrial machines that look nothing like humans. They play an increasingly important role in manufacturing, ushering in new forms of automation and mechanization that may affect developmental models and global supply chain calculations, especially in light of additive manufacturing (3D printing).[23] These

20 C Yoo and J-F Blanchette (eds), *Regulating the Cloud: Policy for Computing Infrastructure* (Cambridge, MA, MIT Press, 2015).

21 N Starosielski, *The Undersea Network* (Durham, NC, Duke University Press, 2015). ML may be used to optimize these systems: M Ionescu et al., "Design Optimisation of Power-Efficient Submarine Line through Machine Learning" (24 February 2020), arXiv:2002.11037.

22 For a discussion of the legal implications see R Calo, "Robotics and the Lessons of Cyberlaw" (2015) 103 *California Law Review* 513; I Cofone, "Servers and Waiters: What Matters in the Law of A.I." (2018) 21 *Stanford Technology Law Review* 167.

23 For a discussion of various use cases see LE Murr, "Frontiers of 3D Printing/Additive Manufacturing: From Human Organs to Aircraft Fabrication" (2016) 32 *Journal of Materials Science & Technology* 987.

changes have inversely correlated implications for trade in goods and trade in services as production at home and service delivery abroad become more feasible, with complex ramifications for the future of workers.[24] All of these digital technology-enabled transformations taken together are sometimes described as the "Fourth Industrial Revolution," or "Industry 4.0."[25] By comparing and contrasting the digital transformation with prior industrial revolutions that were enabled by the steam engine, electricity, and the computer, the infrastructural relevance of digital technologies in general, and AI in particular, to economic development becomes apparent.[26] While various types of AI applications will transform different sectors in different ways, the generalizable feature of AI is its ability to create *insights* through ML on the basis of large datasets. At least since the information economy revolution, it has become obvious that asymmetric control over information is critical to comparative economic advantage. AI's ability to generate information based on existing digitalized information has become an essential infrastructure for all businesses, not just the financial sector, which seems to have recognized this transformation early on.[27] Dan Ciuriak has described this transformation as the shift from a knowledge-based economy to a data-driven economy.[28] AI is a central feature of the data-driven economy because of its ability to create more data, information, and knowledge from existing data. AI's reliance on data also means that existing literature on the digital transformation before current AI technology took off and its implications for IEL remains relevant but must be reassessed against the backdrop of a reality in which AI interacts with various advanced digital technologies.

C *Disrupting Established Assumptions of International Economic Law*

The technological development of AI, as well as the economic transformation it enabled and reinforced, pose distinct challenges for IEL. In this book, we focus primarily on international trade law.[29] The multilateral international economic order has been operating under the auspices of the WTO since 1995. Its

24 R Baldwin, *The Globotics Upheaval: Globalisation, Robotics and the Future of Work* (Oxford, Oxford University Press, 2019).

25 The term was coined by World Economic Forum founder Klaus Schwab; the chapters by Lim (Chapter 5) and Toohey (Chapter 17) in this volume use the concept for their analysis.

26 The leading AI researcher Andrew Ng compared AI to electricity: "Just as electricity transformed almost everything 100 years ago, today I actually have a hard time thinking of an industry that I don't think AI will transform in the next several years." S Lynch, "Andrew Ng: Why AI Is the New Electricity" (*Stanford Business*, 11 March 2017), https://perma.cc/FVA3-W2GA.

27 J Truby, R Brown, and A Dahdal, "Banking on AI: Mandating a Proactive Approach to AI Regulation in the Financial Sector" (2020) 14 *Law and Financial Markets Review* 110 (discussing regulatory challenges).

28 D Ciuriak, "Economic Rents and the Counters of Conflict in the Data-Driven Economy" (2020) CIGI Paper No. 245.

29 As with AI, there is no universally accepted definition of IEL but trade is generally recognized as the core domain of the field. Compare S Charnowitz, "The Field of International Economic Law" (2014) 17 *Journal of International Economic Law* 607.

substantive rules can be traced back to the GATT of 1947, which ushered in a series of tariff liberalizations, followed by agreements that increasingly focused on regulatory matters.[30] With the founding of the WTO, the General Agreement on Trade in Services (GATS) and the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) expanded the scope of international trade law beyond trade in goods. At the same time, the creation of the GATS led to a bifurcation of the international trade regime into trade in goods and trade in services. The distinction is significant, because countries retained more control over services liberalization under the GATS's complex system of positive lists (indicating market access) and negative lists (indicating persistent limitations).[31] The goods/services distinction,[32] however, is increasingly difficult to align with economic reality and may lead to arbitrary results.[33] Moreover, AI-enabled services, even if they are clearly services, may escape the established GATS classification of services or lead to interpretive contests regarding the question of whether a previously analog service is not being performed digitally and should be treated according to the same liberalization commitment the WTO member initially made.[34]

The goods/services distinction and the expansion of AI-enabled services are not the only ways in which assumptions IEL has come to rely on are being upended by transformations in the global economy brought about by AI. Another example concerns the complex incentive structures international intellectual property (IP) law seeks to construct in pursuit of the TRIPS agreement's twin objectives of promoting technological innovation and the transfer and dissemination of technology.[35] The question of whether underlying assumptions about human agency still hold arises, as owners of AI technology have suggested that the AI itself should be designated as "inventor."[36]

Ultimately, foundational conceptual underpinnings of IEL may be disrupted. IEL is often understood to be fundamentally about "trade," the cross-border exchange of goods and services, and "investment," the long-term commitment

30 Ciuriak and Rodionova (Chapter 4 in this volume) take the agreement on technical barriers to trade (TBT) and the agreement on sanitary and phytosanitary measures (SPS) as a baseline to assess the regulatory challenge that AI poses for IEL. Lim (Chapter 5) and Peng (Chapter 6) discuss TBT in more detail.

31 P Low and A Mattoo, "Is There a Better Way? Alternative Approaches to Liberalization under GATS," in P Sauve and RM Stern (eds), *GATS 2000: New Direction in Services Trade Liberalization* (Washington D.C., Brookings Institution, 2000), at 449.

32 S-Y Peng, "A New Trade Regime for the Servitization of Manufacturing: Rethinking the Goods-Services Dichotomy" (2020) 54(5) *Journal of World Trade* 699.

33 See the discussion by Weber (Chapter 3) and Peng (Chapter 6) in this volume.

34 For a brief discussion of the potential and limits of technological neutrality to resolve such conflicts, see Streinz's Chapter 9 in this volume.

35 TRIPS, art 7. On the increasing depth and breadth of intellectual property rights, see S Frankel, "It's Raining Carrots: The Trajectory of Increased Intellectual Property Protection," in G Ghidini et al. (eds), *Kritika: Essays on Intellectual Property Vol. 2* (Cheltenham, Edward Elgar, 2017), at 224.

36 See Mercurio and Yu's Chapter 7 in this volume.

of resources by businesses in host states. The use of inherently multijurisdictional infrastructures for global AI development and deployment may render the notion that this kind of economic activity constitutes "trade" analytically unhelpful or politically unpersuasive.[37] Similarly, digital businesses may operate transnationally without the need to commit resources to a local presence or local means of production akin to conventional "investments." Accordingly, how to conceptualize, categorize, and measure the different transnational commercial interactions in the AI economy remains a major challenge for IEL at this point.

As the next section will discuss, the need for and complexity of AI regulation and the privatization of AI governance pose further challenges for IEL, which has been traditionally geared toward constraining governmental regulation.

III ARTIFICIAL INTELLIGENCE REGULATION AND THE RELEVANCE OF INTERNATIONAL ECONOMIC LAW

AI technologies present new challenges to existing regulatory framework and may require the creation of new regulatory infrastructures. Policymakers must balance different and sometimes competing legitimate public policy objectives, such as fair competition, nondiscrimination, privacy, and security,[38] while avoiding regulatory overreach that may inhibit socially beneficial innovations. Governments around the world are contemplating various forms of AI regulation, ranging from "AI ethics" over transparency requirements for public and private algorithmic decision-making to outright bans of certain AI use cases (such as governmental use of facial recognition technology). At the same time, governments are frantically racing to develop national AI strategies to develop their digital economies. AI technologies trigger and channel political and economic pressures, as evidenced by intensive lobbying and engagement in different governance venues for and against various regulatory choices, including who and what will be regulated, for what purpose, by whom, and how.

Through this volume, we seek to inject IEL into these conversations with two objectives in mind: one is to explore how extant IEL frames these different regulatory initiatives. Which limits do WTO law and the disciplines contained in preferential trade agreements impose on AI regulators? How is IEL shaping different forms of AI regulation and with what outcomes? The other goal is to reflect on IEL's suitability and adaptability to generate societally beneficial outcomes in the context

37 See Fukunaga's Chapter 8 (questioning whether digital trade disputes are trade disputes).

38 In this regard, Art. 198 of the EU-UK Trade and Cooperation Agreement (TCA) represents an example of creating an inclusive list of legitimate objectives. It reaffirms the Parties' right to regulate to achieve legitimate policy objectives, "such as the protection of public health, social services, public education, safety, the environment including climate change, public morals, social or consumer protection, privacy and data protection, or the promotion and protection of cultural diversity."