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Anti-Solutionism and Anti-Formalism in Global Algorithmic Governance Studies

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Claudia Aradau and Tobias Blanke. ***Algorithmic Reason: The New Government of Self and Other***. Oxford: Oxford University Press, 2022. Pp. 288. US$100. ISBN: 9780192859624

Abstract

Digital and non-digital modes of governing the international legal order co-exist. This imbrication brings with it a particular constellation of actors, new sites and processes of governance and new modalities of law-making. Claudia Aradau and Tobias Blanke, in Algorithmic Reason*, guide us through the complex cartographies of global governance. They eloquently map the networks and infrastructures of algorithmic governance and show how they affect the relations between the governing and the governed. Thereby, they help us visualize the imbrication of the local and the global, of private and public infrastructural logics beyond the static binaries that shape our traditional understanding of the international legal order. Throughout multiple case studies, two major transversal claims emerge in the book that are relevant to international lawyers. The book, in my view, argues for (i) an anti-solutionist and (ii) an anti-formalist analysis of global algorithmic governance. As these two transversal claims are not always fully unpacked and explicitly embraced, this review essay aims to draw the contours of these claims, unpack them and show how valuable they can be to think about global algorithmic governance and the functions of international law in the equation.*

1 Introduction: Algorithmic Governance and the Remapping of the International Legal Order

International law and technology have become a subfield of international law,[1] which has been punctuated over the past decade by a growing interest in data-driven practices

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1 Johns and Noll, 'Introduction to the Symposium on Critical International Law and Technology', 117 *AJIL Unbound* (2023) 128, available at https://doi.org/10.1017/aju.2023.24.

of global governance. International legal scholars and practitioners have proposed various pathways to examine, conceptualize, regulate as well as criticize data-driven systems and procedures that affect human bodies, social behaviours and societies transnationally. The vocabularies of international law have been mobilized to reflect on the role of communication platforms and other private actors in world-making activities[2] as well as on the role of these private actors and their public partners in creating digital/non-digital inter-connected spaces and practices that reshape the way in which goods, information, services, aid and money flow.[3] International legal norms and lenses have also been deployed to reflect on how security communities – from the military and immigration and border management to law enforcement – rely on a mixture of digital and non-digital tools[4] and to describe their evolution and interconnection in simultaneously fluid digital networks and territorially rooted settings and conditions.[5] These activities, neither exclusively national nor completely global, are sites of transformation for the traditional modus operandi of international law.[6]

Claudia Aradau and Tobias Blanke, in *Algorithmic Reason*, guide us through the complex cartographies of global governance. Through an eloquent mapping exercise accompanied by visual and textual representations of networks and infrastructures of algorithmic governance, the authors populate our imaginary of the contemporary international legal order. In this way, they help us visualize the imbrication of the local and the global within private and public infrastructural logics. This imbrication, as well as these blended infrastructural logics, go beyond the static binaries that shape our traditional understanding of the international legal order. We navigate, for

2 See, e.g., Suzor *et al.*, 'Human Rights by Design: The Responsibilities of Social Media Platforms to Address Gender-Based Violence Online', 11(1) *Policy and Internet* (2019) 84; R.F. Jørgensen (ed.), *Human Rights in the Age of Platforms* (2019); Benvenisti, 'Upholding Democracy amid the Challenges of New Technology: What Role for the Law of Global Governance?', 29(1) *European Journal of International Law* (*EJIL*) (2018) 9.

3 See, e.g., Ryngaert and Noortmann, 'New Actors in Global Governance and International Human Rights Law', 4(1) *Human Rights and International Legal Discourse* (2010) 5; Bexell, Tallberg and Uhlin, 'Democracy in Global Governance: The Promises and Pitfalls of Transnational Actors', 16(1) *Global Governance* (2010) 81; W.H. Reinicke *et al.*, *Critical Choices: The United Nations, Networks, and the Future of Global Governance* (2000); Bloch-Wehba, 'Global Platform Governance: Private Power in the Shadow of the State', 72(1) *Southern Methodist University Law Review* (2019) 27; Kingsbury, 'Introduction to the Symposium on Infrastructuring International Law', 117 *AJIL Unbound* (2023) 1, available at https://doi.org/10.1017/aju.2022.74; Kingsbury, 'Infrastructure and InfraReg: On Rousing the International Law 'Wizards of Is', 8(2) *Cambridge International Law Journal (CILJ)* (2019) 171, available at https://doi.org/10.4337/cilj.2019.02.01.

4 Van Den Meerssche, 'Virtual Borders: International Law and the Elusive Inequalities of Algorithmic Association', 33(1) *EJIL* (2022) 171, available at https://doi.org/10.1093/ejil/chac007; Gordon, Mignot-Mahdavi and Van Den Meerssche, 'The Critical Subject and the Subject of Critique in International Law and Technology', 117 *American Journal of International Law* (2023) 134; R. Mignot-Mahdavi, *Drones and International Law: A Techno-Legal Machinery* (2023).

5 Mignot-Mahdavi, *supra* note 4; see also, e.g., Molnar, 'Technology on the Margins: AI and Global Migration Management from a Human Rights Perspective', 8(2) *CILJ* (2019) 305.

6 Sassen, 'Neither Global nor National: Novel Assemblages of Territory, Authority and Rights', 1 *Ethics and Global Politics* (2008) 61; see also L. Eslava, *Local Space, Global Life* (2015); Walker, 'Out of Place and Out of Time: Law's Fading Co-ordinates', 14(1) *Edinburgh Law Review* (2010) 13.

instance, the relationship between Facebook and its workers, oscillating between the global nature of this working place and the locally rooted class action conducted by moderators against Facebook. Aradau and Blanke tell the story of refugees and the fact that digital payment mechanisms can fail to operate for them due to international sanctions on financial transactions in host countries or because of a lack of documentation to verify their identity. *Algorithmic Reason* also traces the multiplicity of algorithmic decisions when it comes to anticipating risks and anomalies, domestically, at the border and extraterritorially. The book manages to simultaneously show, in situated observable contexts, how these trajectories are very diffuse and dispersed, on the one hand, and have tangible effects for the lives of individuals and communities, on the other hand.

While recent practices of global algorithmic governance do not entirely or necessarily escape the traditional institutional frames of international law, the imbrication of digital and non-digital conditions of governance comes not only with a particular constellation of actors and new sites and processes of governance but also with new modalities of law-making. Various institutions that compose the global digital architecture and bring private and public entities together are increasingly relevant sites of norm production and proliferation. These norms, regardless of their formal source or nature, stabilize practices that have, in turn, important effects on people and societies at domestic and transnational levels.[7] The reconfiguration of the global landscape has prompted international legal scholars to think beyond traditional binaries. These dichotomies include rethinking the distinctions between national and international, private and public, formal and informal law-making as well as soft and hard law.

In this context of socio-technical mutations, several approaches have emerged in international legal scholarship that can be roughly distinguished into two categories. On the one hand, the international legal field has been dominated by regulatory moves, prompted by the aim to use the international legal toolbox to regulate new technological 'objects' and practices. The use of international law to address problems posed by autonomous weapons systems and other technologies on the battlefield is just one particularly prominent example of such a 'solutionist' approach.[8] On the other hand,

[7] Mignot-Mahdavi, 'The Legal Fabrique of Global Security Governance' (forthcoming).

[8] Verena Jackson, 'Autonomous Weapons Systems in Armed Conflicts: New Challenges for International Law', in J. Berghofer *et al.*, *The Implications of Emerging Technologies in the Euro-Atlantic Space: Views from the Younger Generation Leaders Network* (2023) 159; White, 'Brave New World: Neurowarfare and the Limits of International Humanitarian Law Symposium: Immigration Policy: Who Belongs – Note', 41(1) *Cornell International Law Journal* (2008) 177; Eneyew Ayalew, 'Cyber Warfare: A New Hullaballoo under International Humanitarian Law', 6(4) *Beijing Law Review* (2015) 209; W. Heintschel von Heinegg and V. Epping, *International Humanitarian Law Facing New Challenges: Symposium in Honour of KNUT IPSEN* (2007); Shereshevsky, 'International Humanitarian Law-Making and New Military Technologies', 104(920–921) *International Review of the Red Cross* (*IRRC*) (2022) 2131; Szpak, 'Legality of Use and Challenges of New Technologies in Warfare: The Use of Autonomous Weapons in Contemporary or Future Wars', 28(1) *European Review* (2020) 118, available at https://doi.org/10.1017/S1062798719000310; Backstrom and Henderson, 'New Capabilities in Warfare: An Overview of Contemporary Technological Developments and the Associated Legal and Engineering Issues in Article 36 Weapons Reviews', 94(886) *IRRC* (2012) 483.

a growing number of more recent interventions have used international law's critical repertoires not to organize, order or constrain the use of new technologies – the law is generally considered, in these scholarly propositions, as part of the problem. Rather, these interventions aim to recognize and make visible the techniques of governance and the modes of subjectivities that techno-legal assemblages produce or stabilize.[9] For instance, they look at how law and technology, together, constitute factors of networks that exacerbate the production of inequalities at virtual borders;[10] how they stabilize and normalize surveillance apparatuses on the battlefield. Regardless of the chosen approach – either when looking at the law in a solutionist manner or as part of socio-technical assemblages – and because of the context of the socio-technical mutations mentioned above, making meaningful scholarly interventions on data-driven governance practices often requires international legal scholars to think beyond rigid disciplinary boundaries.

This thinking beyond traditional boundaries, which facilitates and stimulates theoretical reflections and reorientations within the field of international law, requires us to explore literary terrains beyond what is traditionally referred to as the international legal discipline. For those wandering readers in the flourishing field of international law and technology, Aradau and Blanke's *Algorithmic Reason* emerges as an indispensable companion to understand and reflect on the conditions of possibility and materializations of algorithmic modes of governance.[11] The book's main aim is to trace how algorithmic governance – used in multiple settings ranging from crime management, counter-terrorism, border control and security practices in general to humanitarianism and democratic governance – 'reshapes power relations between the governing and the governed' and brings to bear 'a new government of self and other' whereby one's language, body and actions form clusters of data points that can be (and are) processed by algorithmic systems.[12] This new mode of government of self and other, the authors argue, 'transcend[s] binaries between individual and population' as algorithmic systems promise some sort of infinite minutia of knowledge that allows the governing of all individuals and entire populations simultaneously.[13]

The book is structured around three parts on the 'rationalities' (Part I) and 'materializations' (Part II) of algorithmic governance as well as on 'interventions' (Part III)

[9] See, e.g., Van Den Meerssche, *supra* note 4; F. Johns, *#Help: Digital Humanitarianism and the Remaking of International Order* (2023); R. Mignot-Mahdavi, *Drones and International Law: A Techno-Legal Machinery* (2023); Gordon, Mignot-Mahdavi and Meerssche, *supra* note 4; Klonowska, 'Article 36: Review of AI Decision-Support Systems and Other Emerging Technologies of Warfare', in Terry D. Gill *et al.* (eds), *Yearbook of International Humanitarian Law*, vol. 23 (2020) 123.

[10] Van Den Meerssche, *supra* note 4; Mignot-Mahdavi, *supra* note 9.

[11] C. Aradau and T. Blanke, *Algorithmic Reason: The New Government of Self and Other* (2022).

[12] *Ibid.*, at 3.

[13] *Ibid.*, at 206–207. This objective to monitor the whole in an individualized manner, in my view, far from transcending the binary between individual and population, strengthens it. Systems that build on the promise of governing both individuals and the whole of the minutia of knowledge for the whole of the human population reveal, contrary to what is argued in the book, an obsession with the binary individual/population. This 'problem of power', as the authors name it – the preoccupation of modes of governance with a holistic minutia of knowledge – is not new. See M. Foucault, *Discipline and Punish: The Birth of the Prison*, translated by Alan Sheridan (rev. edn, 1991), at 135–169.

that, in one way or another, supervise, circumscribe or divert the rationalities and materializations of algorithmic governance. All three parts are punctuated by granular, textured, empirical analyses of algorithmic modes of governance. These analyses include, for instance, the study of the massive harvesting of data by Cambridge Analytica, the now-defunct British political consulting firm that obtained the data of approximately 87 million Facebook users without their explicit consent, revealing 'the ability to decompose the largest population into the smallest data and to recompose the smallest part in the largest possible data'.[14] They include different modes of algorithmic data exploitation and extraction and the ensuing knowledge production by big tech platforms such as Google, Meta and Spotify.[15] Finally, Aradau and Blanke show us how algorithmic decisions create the figure of the 'dangerous other': an individual considered different from the norm who may find themselves on the receiving end of signature strikes, facial recognition measures and/or predictive policing.[16]

Throughout these case studies, two major transversal claims emerge that are relevant to international lawyers. The book, in my view, argues for (i) an anti-solutionist and (ii) an anti-formalist analysis of global algorithmic governance. These two transversal claims are not always fully unpacked and explicitly embraced. My intention in this review essay is to draw the contours of these transversal claims more saliently, to unpack them and to show how valuable it can be to think about the multiple facets of global algorithmic governance and the roles and functions of international law within it.

2 Anti-solutionism in Global Algorithmic Governance

In each of the sites of algorithmic governance they explore, Aradau and Blanke formulate a critique of the simplistic perception that algorithmic systems are objects that are waiting to be seized and moulded by human actors.[17] They deplore that algorithms are 'assumed to be mouldable at will, as *tools* to be subsumed to the ethical decisions of engineers, coders, and computer scientists'.[18] By challenging the solutionist idea that technology comprises objects to be fixed, Aradau and Blanke simultaneously offer, in my view, a series of empirical challenges to the modernist belief in human agency. They systematically show how human and non-human actors interact within the socio-technical assemblages that they compose when algorithmic systems are used in multiple settings ranging from crime management, counter-terrorism, border control and security practices in general to market economy, humanitarianism and democratic governance. Aradau and Blanke's objective, in other words, is not to show how humans fix technology. Rather, their book illustrates the modes of governance

[14] Aradau and Blanke, *supra* note 11, ch. 1.
[15] *Ibid.*, chs 4, 5.
[16] *Ibid.*, chs 2, 3, 7.
[17] Aradau and Blanke are most interested in the power dynamics at play in practices of algorithmic governance. This requires looking at the technology not as a mere object but, rather, as part of a 'network of relations, constantly in tension, in activity'. See *Ibid.*, at 103.
[18] *Ibid.*, at 141 (emphasis added).

emerging from the interaction between algorithmic systems and people, showing how this interaction transforms people's language, bodies and actions into clusters of data points that can be (and are to be ineluctably) processed by algorithmic systems. This, in turn, 'reshapes power relations between the governing and the governed', and inaugurates 'a new government of self and other', while also producing new modes of friction and refusal.

This approach sets Aradau and Blanke's book apart from the mainstream international law and technology literature, which is characterized by a belief in human agency and expertise. That international lawyers adopt solutionist attitudes to new phenomena that become salient in the international legal order is neither new nor specific to the field of international law and technology.[19] Indeed, the self-fulfilling prophecy that international legal norms offer a set of tools different from, and applicable to, phenomena in the world, and, more broadly, that human beings are experts in world making, is limited to neither scholarship on international law and technology nor legal scholarship.[20] Although the solutionist attitude is not a novel one in international law, international lawyers' tendency to occupy positions of expertise is exacerbated in the field of international law and technology. The exercise that consists in identifying, or even predicting, challenges posed by new technologies to the law and demonstrating a capacity to remain in control and provide solutions to such challenges has been prevalent in the field. Entire scholarly articles build on the premise that the techno-future holds mysteries that can be resolved by legal expert analysts who can speculate about and deal with the features of this techno-future;[21] entire books cultivate the belief that, in facing such mysteries and hurdles, international law

[19] Solutionist moves and the notion of solutionism have been made, analysed as well as criticized in many disciplines of the humanities, to strengthen or challenge the belief that phenomena that emerge in the world can be fixed by human agents, technocrats and human experts. See, e.g., Fogg, 'Two Views of Law and Social Process', 17(1) *University of Queensland Law Journal* (1992) 1; Layne, 'The Cultural Fix: An Anthropological Contribution to Science and Technology Studies', 25(4) *Science, Technology, and Human Values* (2000) 492, available at https://doi.org/10.1177/016224390002500405; R. Feldman, *The Role of Science in Law* (2009); d'Aspremont, 'A Worldly Law in a Legal World', in A. Bianchi and M. Hirsch (eds), *International Law's Invisible Frames: Social Cognition and Knowledge Production in International Legal Processes* (2021) 110, available at https://doi.org/10.1093/oso/9780192847539.003.0007; Cunningham *et al.*, 'On the Grounds of Solutionism: Ontologies of Blackness and HCI', 30(2) *ACM Transactions on Computer-Human Interaction* (2023) 20-1, available at https://doi.org/10.1145/3557890.

[20] See, e.g., R. Feldman, *The Role of Science in Law* (2009); d'Aspremont, 'A Worldly Law in a Legal World', in Bianchi and Hirsch, *supra* note 19, 110, available at https://doi.org/10.1093/oso/9780192847539.003.0007; Cunningham *et al.*, *supra* note 19.

[21] For examples of exercises of speculation, see Dwyer, 'The Unknowable Conflict Tracing AI, Recognition, and the Death of the (Human) Loop', in F. Cristiano *et al.* (eds), *Artificial Intelligence and International Conflict in Cyberspace* (2023) 19 ('[i]n exploring AI systems and unknowability in contemporary, and probable future, conflict, I probe "deep" reinforcement learning (RL). Deep RL can be summarised, for now, as an iterative system that includes "agents" who "learn" from an environment to improve their next action to attain a (pre-determined and desired) goal. I do this as a speculative exercise due to its strong applicability to adversarial moves by "agents" to examine their potential application in both military wargaming as well as in offensive cyber operations').

can make us immune to any techno-legal troubles that are emerging or might spring up in the future.[22]

In such solutionist international legal works, 'aimed at generating order-restoring answers' to the challenges thought to be posed by technological change,[23] technology is envisioned as a mere object waiting to be shaped and regulated by human beings. In a different way, other international legal scholars have considered technology as a factor related to other human and non-human factors, assembled in a network and producing, in concert, socio-technical phenomena.[24] In socio-technical networks and fabrics, international legal norms, actors and processes appear alongside the relevant technologies as stabilizing, normalizing or structuring forces. While many international lawyers' first impulse is to search for and formulate regulatory solutions to new technologies,[25] scholars in other fields seem to have more readily focused on tracing, from very early on, the constitutive effects of data-driven practices. Aradau and Blanke bring to the international lawyer's attention the idea that, across several disciplines, most scholarly works in the humanities on algorithms, digital technologies and artificial intelligence have focused on the depoliticizing and de-democratizing potential of such technologies.[26] Much work has been dedicated, for instance, to the 'practices of domination, oppression, colonialism, deprivation of freedom, and debilitation of political agency' produced by practices based on algorithmic systems.[27] In the meantime, our field, tormented by the search for solutions in the law, has lagged behind in showing the concrete effects of techno-legal apparatuses and in explicating how the law often serves to stabilize or amplify these effects.

This stabilizing function of the law can derive not only from the formulation of new legal interpretations or frameworks that legitimize certain practices but also from the

[22] François Delerue's *Cyber Operations and International Law* (2020) opens with the following mystical statement: 'We all know that international law matters in the real world, but if and how it matters in the cyber world is an open question.' Although his analysis rests on cases of cyber operations that have occurred, the author's intention to exhaustively pre-empt all international legal questions related to cyber operations leads him to work on the basis of multiple hypothetical scenarios.

[23] See Johns and Noll, *supra* note 1, referring to Sohn, 'The Impact of Technological Changes on International Law', 30(1) *Washington and Lee Law Review* (1973) 1.

[24] J. Law, *Aircraft Stories: Decentering the Object in Technoscience* (2002), at 2 (Law talks about fractional coherence as the way of 'drawing things together without centering them'; 'Knowing subjects, or so we've learned since the 1960s, are not coherent wholes. Instead they are multiple, assemblages. This has been said about subjects of action, of emotion, and of desire in many ways, and is often, to be sure, a post-structuralist claim. But I argue in this book that the same holds for objects too'). For examples of international legal scholarship that departs from an overly voluntarist perspective on technology and uses an actor-network-theory approach, see N. Bhuta *et al.* (eds), *Autonomous Weapons Systems: Law, Ethics, Policy* (2016), available at https://doi.org/10.1017/CBO9781316597873; Klonowska, *supra* note 9; Van Den Meerssche, *supra* note 4; Johns, *supra* note 9; Mignot-Mahdavi, *supra* note 9.

[25] Feldman and Mecacci, 'Four Responsibility Gaps with Artificial Intelligence: Why They Matter and How to Address Them', 34(4) *Philosophy and Technology* (2021) 1057, available at https://doi.org/10.1007/s13347-021-00450-x.

[26] Aradau and Blanke, *supra* note 11, at 14, 55. They bring nuance to this point by emphasizing throughout the book that 'rather than depoliticizing, neutralizing, or apolitical, the materializations of algorithmic reason are deeply political' (at 9, 204–218).

[27] *Ibid.*, at 14.

very foundational premises of the existing legal frameworks that leave algorithmic modes of governance unchallenged. For instance, *Algorithmic Reason* fruitfully formulates intuitions on the limits of the privacy and human rights framework. Aradau and Blanke convincingly argue that 'we cannot speak of "data leakage" anymore, as data circulations have become an unexceptional, mundane practice of how platforms work'.[28] They also note that 'the increasing use of digital technologies, digital interactions, and digital transactions with tech companies cannot be addressed through the lens of privacy and data protection alone',[29] and they showcase Algorithm Watch's argument 'that algorithmic discrimination does not necessarily affect individual rights, as "discrimination only becomes visible when comparisons are made between different collectives"'.[30]

This argument, combined with the above demonstration that, albeit non-binding, webs of norms powerfully stabilize global governance practices, could serve to show that privacy rights and human rights law and repertoires are not only failing to solve the problems of global algorithmic governance, but rather form part of these problems. Aradau and Blanke's interest in modes of contestation – what they call 'interventions'[31] against algorithmic governance – and in the failures of privacy rights and data protection vocabularies should be a source of inspiration for international lawyers.

The digital world emphasizes our modern belief in the light of reason, in the scientifically and automatically discoverable truth. Aradau and Blanke mobilize the notions of 'truthful knowledge' or 'truth-doing about oneself' to describe, in a Foucauldian fashion, the belief that algorithmic modes of governance are capable of accurately tracing the truth, to detect what they call 'honest signals', or anomalies.[32] In the same vein, privacy and human rights law's dominant doctrines cultivate a tight link between perceptibility – data about us that algorithmic systems can capture – and privacy – what needs to be protected.[33] By doing so, the narrative that lies at the heart of the right to privacy rests on the idea that what is perceptible, what can be captured, is what matters: what can be captured is what deserves to be secured and protected

[28] *Ibid.*, at 108.
[29] *Ibid.*
[30] *Ibid.*, at 150.
[31] *Ibid.*, at 139–203.
[32] See, e.g., *ibid.*, at 36–40, 72–82.
[33] D.C. Gray and D.K. Citron, 'A Technology-Centered Approach to Quantitative Privacy', *Social Sciences Research Network* (2012), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2129439; J. Cohen, *Configuring The Networked Self* (2012), at 124–125 ('[w]ithin Western culture, vision is linked metaphorically with both knowledge and power. The eye has served throughout history as a symbol of both secular and religious authority. The Judeo-Christian God is described as all-seeing, and worldly leaders as exercising "oversight" or "supervision." Cartesian philosophy of mind posits that objects and ideas exist "in the field of mental vision," where truth is "illuminated" by the "light of Reason"'). In the language of everyday conversation, someone who understands is one who 'sees'; someone who doesn't get it is 'blind.' More generally, in her book, Julie Cohen contests the under-theorization of the field of privacy law and doctrine that she finds 'unsuccessful at reflecting on the kind of subjectivity that a regime of privacy protection promotes' (at 7); she deplores that 'important questions about the value of privacy and the truth gains from information processing go unanswered, and often unasked' (at 12).

by our human rights frameworks. It follows that if something generally deserves to be kept private, this same thing also deserves to be singled out and placed at the heart of digital security or marketing practices.

In other words, human rights and privacy rules and doctrines further saturate our world and practices with the belief in a digital recording of 'reality', or at least do not serve to challenge the belief in the algorithmic capture of so-called 'reality'.[34] Although one can understand, in a context of thirst for ever more data, the impetus to protect such data, both sides of the battle for 'more' or 'less' information or signals elevate such capturable information and data as most valuable knowledge.[35] What if protecting individuals (and their privacy) required us to understand them in their unreadability and not as perceptible individuals whose capturable data should be protected in principle but captured when security or markets require it?

Suspending our solutionist attitude is an essential move that allows us to explore the different functions performed by international law – beyond its claim to offer solutions to problems of technology. It is essential to appreciate how international law shapes the world, and in this case: how it can strengthen algorithmic modes of governance.

3 Anti-formalism in Global Algorithmic Governance

Although Aradau and Blanke modestly refrain from framing their contribution in these terms, their book also helps to think about how algorithmic governance reconfigures the international legal order's constellations of actors and regulatory tools. The book points on multiple occasions to the proliferation of ethical guidelines and frameworks, and to the production of these regulatory documents by a wide variety of actors. These guidelines and frameworks, the authors note, 'are underpinned by shared assumptions and norms' that either build on or borrow international law and fundamental rights' repertoires, with an emphasis on data protection and privacy.[36] The book also shows that ethical standards, guidelines and frameworks are very powerful tools to 'conduct conducts'.[37]

In Chapter 6, *Algorithmic Reason* scrutinizes the modalities through which ethics is deployed as a technique of government to tame power or appear to do so. The move to ethics is portrayed as a way to form an imaginary of consensual 'corrective interventions on algorithmic reason' and conceal dissensus.[38] Ethical guidelines and frameworks, as tools of prestidigitation, camouflage 'the racialized and gendered bodies most affected by algorithmic operations':[39] these bodies and individuals over which

[34] Rouvroy and Berns, 'Gouvernementalité algorithmique et perspectives d'émancipation. Le disparate comme condition d'individuation par la relation?', 177(1) *Réseaux* (2013) 163.

[35] Rouvroy, 'Des données sans personne: le fétichisme de la donnée à caractère personnel à l'épreuve de l'idéologie des Big Data', in *Le numérique et les droits et libertés fondamentaux. Etude annuelle du Conseil d'Etat* (2014) 407.

[36] Aradau and Blanke, *supra* note 11, at 142.

[37] *Ibid.*, at 144, 146, 163, 164, 194, 202, 207.

[38] *Ibid.*, at 141, 144.

[39] *Ibid.*, at 141.

algorithmic governance performs techniques of domination have no say in determining what an ethical algorithm is. As a result, the idea that ethical guidelines and frameworks would rectify or cure algorithmic modes of governance from their oppressive potential is, according to the authors, misguided. The rationale they identify for the shortcomings of these regulatory documents is that ethics 'is limited and cannot therefore provide a fully corrective or limiting intervention' and that ethical guidebooks lack 'the force of legal codebooks'.[40]

Although I could not agree more with the observation that ethical guidelines and frameworks are far from mitigating the oppressive potential of algorithmic modes of governance, another narrative can be formulated to account for this shortfall. It is true that most of the outputs produced by newly created institutions of global (algorithmic) governance are non-binding: they do not adopt formal treaties or any other formally binding source of international law[41] but, rather, as Aradau and Blanke show, a variety of toolkits, manuals and frameworks. However, despite their non-bindingness, and even sometimes because of their non-binding character, the norms created in these unusual institutional settings of law-making can have a normative strength;[42] they can stabilize as well as reinforce 'implicit hierarchies of humanity', to borrow Aradau and Blanke's own words.[43] Very problematic pre-emptive, exclusionary and highly discriminatory practices are normalized and stabilized through such webs of non-binding norms.[44]

A plethora of non-formally binding norms have been created in new sites of global digital governance. These norms have been equated to 'rules of thumb or soft standards' and are generally labelled according to a grammar that downplays their legality.[45] Even scholars, who convincingly establish that these norms (and how we think about them) matter for international law, simultaneously perpetuate the definition of such norms as not-exactly-legal creatures.[46] Some use the classical soft law terminology in combination with the informal law-making label (and establish an almost automatic

[40] *Ibid.*, at 144.

[41] Pauwelyn, 'Informal International Lawmaking: Framing the Concept and Research Questions', in J. Pauwelyn, R. Wessel and J. Wouters (eds), *Informal International Lawmaking* (2012) 17.

[42] M. Chinen, *The International Governance of Artificial Intelligence* (2023).

[43] Aradau and Blanke, *supra* note 11, at 142.

[44] R. Kassem, R. Mignot-Mahdavi and G. Sullivan, 'Watchlisting the World: Digital Security Infrastructures, Informal Law, and the "Global War on Terror"', *Just Security*, 28 October 2021, available at www.justsecurity.org/78779/watchlisting-the-world-digital-security-infrastructures-informal-law-and-the-global-war-on-terror/; F. Ní Aoláin, A. Yamamoto and M.L. Manion, 'Looks Are Deceiving: The Rebranding and Perpetuation of Counterterrorism Watchlisting in Multilateral Spaces', *Just Security*, 28 January 2022, available at www.justsecurity.org/79994/looks-are-deceiving-the-rebranding-and-perpetuation-of-counterterrorism-watchlisting-in-multilateral-spaces/.

[45] Koskenniemi, 'International Law: Constitutionalism, Managerialism and the Ethos of Legal Education', 1 *European Journal of Legal Studies* (2007) 1, at 8.

[46] See, e.g., F. Johns, *Non-Legality in International Law, Unruly Law* (2013), at 20 (emphasis added) ('[i]nternational lawyers' makings of *non-legality* (that is, in this book's terms, extra-legality, illegality, pre- and post-legality, supra-legality and infra-legality) also shape the content of international law, the ambit of possibility generated in international legal work, and the scope of the responsibilities that international lawyers assume in any one area'); I. Roele, *Articulating Security: The United Nations and its Infra-Law* (2022).

correlation between softness and informality),[47] while others use new vocabularies.[48] In any case, ethical guidelines and frameworks are referred to as 'quasi law' and/or placed 'outside the realm of law'.[49]

There are reasons why recognizing the legality and stabilizing force of norms produced in global algorithmic governance matters. Indeed, downplaying the legality and strength of norms produced by global governance institutions and actors simultaneously downplays the stability and rootedness of their effects. The evidence assembled in *Algorithmic Reason* illustrates the enormous normative pull and impact of ethical standards, guidelines and frameworks, which should not be relegated to the realm of 'quasi-law'.[50] I believe that the narrative according to which they have an important legal pull better corresponds to the authors' intuitions. Of course, this narrative assumes an anti-formalist understanding of legal norms, which rejects the formal conception of legal validity and instead adopts an effect-based approach to law ascertainment.[51] Far from the traditional equation drawn between bindingness and softness, I submit, with others (and could build on Aradau and Blanke's work to support this argument), that formal bindingness cannot be considered to be an essential feature of strong governance and regulation.[52]

47 See, e.g., Ni Aolain, 'Soft Law, Informal Lawmaking and New Institutions in the Global Counter-Terrorism Architecture', 20 *EJIL* (2021) 1; Kassem, Mignot-Mahdavi and Sullivan, *supra* note 45.

48 On the concept of 'infra-legality', see Johns, *supra* note 47, at 10 ('making infra-legality is the name which this book gives to the practice of relegating certain issues, experiences and elements to international law's margins, as the natural, the incidental, or the unworthy of direct notice'). On the concept of 'anti-law law', see A. Rodiles, *Coalitions of the Willing in International Law* (2018); Roele, *supra* note 47.

49 Johns, *supra* note 47, at 24 (*Non-Legality in International Law, Unruly Law* designs a typology of all the codes, arguments and practices shaping international law). Isobel Roele's *Articulating Security* distinguishes between law, infra-law, anti-law and uncanny law. While she says that all these shapes are types of law, she seems to doubt their legal nature on several occasions. Roele, *supra* note 47.

50 Aradau and Blanke, *supra* note 11, at 144, 146, 163, 164, 194, 202, 207.

51 For supporting reflections on the move to an effect-based approach to law ascertainment, see Mignot-Mahdavi, 'The Legal Fabrique of Global Security Governance', 1 (23) *The Global Community Yearbook of International Law and Jurisprudence* (forthcoming 2024), available at https://ssrn.com/abstract=4652568; Kingsbury, 'The Concept of "Law" in Global Administrative Law', 20 *EJIL* (2009) 26; Boucobza, 'Le droit administratif global, essai d'analyse critique d'un courant de pensée', 5 *Revue française de droit administratif* (2019) 824; Howse and Teitel, 'Beyond Compliance: Rethinking Why International Law Really Matters', 1(2) *Global Policy* (2010) 127; J. Brunée and S.J. Toope, *Legitimacy and Legality in International Law: An Interactional Account* (2010), at 46–47; J. Alvarez, *International Organizations as Law-makers* (2005); Brunée and Toope, 'International Law and Constructivism, Elements of an International Theory of International Law', 39 *Columbia Journal of Transnational law* (2000–2001) 19, at 65. This also seems to be the approach taken in Weiler, 'The Geology of International Law – Governance, Democracy and Legitimacy', 64 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* (2004) 547. As also summarized and analysed in J. d'Aspremont, *Formalism and the Sources of International Law* (2011), at 4–5, studies about non-state actors have also used non-formal law-identification criteria. See, e.g., A. Peters *et al.*, 'Non-state Actors as Standard Setters: Framing the Issue in an Interdisciplinary Fashion', in A. Peters *et al.* (eds), *Non-State Actors as Standard Setters* (2009) 1.

52 See, e.g., J. Klabbers, *International Law* (2013), at 28. Although they adopt different terminologies and do not necessarily call these norms legal ones – but decide, instead, to talk about extra-legality, illegality, pre- and post-legality, supra-legality, infra-legality – the following scholarly works recognize the world-making potential of non-binding norms of global governance. Johns, *supra* note 47; Roele, *supra* note 47; Ni Aolain, *supra* note 48; Rodiles, *supra* note 49.

The traditional binary between soft and hard law, and their equation with, respectively, non-bindingness and bindingness, rests on a thought structure that is, at best, a mirage and, at worst, one of the most misleading creations of the orthodox international legal mind. Norms of global algorithmic governance should be described as 'law' to lay bare the dramatic consequences of legality, in our case, of norms of global algorithmic governance. As long as a document, a text or a norm is adopted to regulate or frame practices of global governance, and does in fact frame, shape, normalize or stabilize such practices, it can be recognized as a legal form. Recognizing regulatory frameworks and documents as legal norms and as powerful ones gives these norms the visibility that is necessary to be fully contested.

4 Concluding Remarks: The Inescapable Participation in Truth-Telling Regimes?

Jumping from one site of algorithmic governance to another with dexterity, *Algorithmic Reason* creates a genre of its own between eclecticism and (inter-)disciplinary reflectivity, depth and rigour. To achieve their exploration as brilliantly as they did, did Aradau and Blanke really need the concept of 'algorithmic reason'? This concept somehow translates an ontological ambition to find a unique conceptual term that successfully and holistically captures the phenomena produced by algorithmic modes and techniques of governance.[53] This concept encapsulates different gestures and refusals throughout the book: attempts to clarify and classify; the refusal of 'too much messiness and contingency' afforded to algorithms because such messiness makes algorithmic governance 'difficult to diagnose';[54] or else the aspiration to '[unblock] the impasses of knowledge'.[55] These gestures and refusals bring the book, on some rare but noticeable occasions, very close to international legal thought's own laborious emancipation from a modernist pseudo-scientific project. Behind the scenes of masterful disciplinary acrobatics that will amaze as much as educate international legal scholars, a spectre of rationalization and scientificity sometimes hangs over the book's own anti-scientificist ambitions.

In fact, in Part III on 'Interventions', *Algorithmic Reason* displays the 'solutionist' colours that taint the mainstream international law and technology scholarship. After showing how 'algorithmic variations inflect and hold together heterogeneous practices of governing across time and space' in Parts I and II,[56] Part III suggests that 'scenes of dissensus and controversy can become democratic scenes' where processes of de-democratization are confronted with interventions against algorithmic governance that have an emancipatory potential.[57] In this sense,

[53] For expressions of this conceptual ambition, see Aradau and Blanke, *supra* note 11, at 3, 5, 206.
[54] *Ibid.*, at 7.
[55] *Ibid.*, at 3.
[56] *Ibid.*, at 14, 21–135.
[57] *Ibid.*, at 14, 138–218.

Algorithmic Reason testifies to the difficulty for scholars in the humanities – even the most self-reflective and anti-modernist ones – to escape an aspiration to elucidate, diagnose and solve. The book recognizes, deplores and simultaneously confirms our difficulty in putting an end to humanities' participation in progressivist truth-telling regimes.