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THE TECHNOLOGICAL LIMITS OF THE RULE OF LAW, AND THE PERSPECTIVE OF DEVELOPING STATES

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Abstract

The 4th industrial revolution and its attendant technologies have given rise to many discussions around the impact of technology on the rule of law. A fundamental premise of the rule of law is that it requires an effective sovereign to establish formal legality. The sovereigns undertaking this responsibility today are states. However, the digital spaces by their very nature challenge the ability of states to do so. Digital spaces present challenges to traditional territorial notions of jurisdiction resulting in their tendency to be “ungoverned”. Ungoverned digital spaces, as with their physical counterparts, are spaces where the rule of law does not operate. Moreover, ungoverned digital spaces can also impact governance in physical spaces. But not all states are equal, and each has unique social contexts to grapple with. Thus, in considering the questions around technology and the rule of law, it is necessary to consider the difference in contexts between states. Such topics are also generally discussed from the perspective of developed and industrialized states, where technology is most extensively developed and deployed. But the impact of the 4th industrial revolution is not limited to the developed world, and communities in developing states constantly engage with such technology, particularly with social media, even if such technology and platforms are developed elsewhere. This paper considers the impact of digital spaces on the rule of law from the perspectives of developing states, focusing on Southeast Asia.

Keywords: rule of law; technology; social media; developing states; jurisdiction

Abstrak

Revolusi industri ke-4 dan teknologi yang menyertainya telah memunculkan banyak diskusi seputar dampak teknologi terhadap supremasi hukum. Premis mendasar dari negara hukum adalah kebutuhan akan kedaulatan yang efektif untuk membangun legalitas formal. Negara hadir sebagai penguasa yang bertanggung jawab. Namun, ruang digital pada dasarnya menjadi tantangan tersendiri bagi negara. Tantangan ruang digital hadir pada gagasan teritorial tradisional tentang yurisdiksi yang mengakibatkan kecenderungan mereka untuk “tidak diatur”. Ruang digital yang tidak diatur adalah ruang di mana aturan hukum tidak ditegakkan. Selain itu, ruang digital yang tidak diatur juga dapat memengaruhi tata kelola di ruang fisik. Tetapi tidak semua negara adalah sama, dan masing-masing memiliki konteks sosial yang unik untuk dihadapi. Jadi, dalam mempertimbangkan pertanyaan seputar teknologi dan supremasi hukum, perlu dipertimbangkan perbedaan konteks antar negara. Topik seperti itu juga umumnya dibahas dari perspektif negara maju dan negara industri, di mana teknologi paling luas dikembangkan dan digunakan. Tetapi dampak dari revolusi industri ke-4 tidak terbatas pada negara maju, dan masyarakat di negara berkembang terus-menerus terlibat dalam penggunaan teknologi tersebut, terutama dengan media sosial, bahkan jika teknologi dan platform tersebut dikembangkan di tempat lain. Makalah ini mempertimbangkan dampak ruang digital terhadap supremasi hukum dari perspektif negara berkembang, dengan fokus di Asia Tenggara.

Kata kunci: supremasi hukum; teknologi; media sosial; negara berkembang; yurisdiksi.

*'We have to be ... modest in our pride in the rule of law.'*¹

I. INTRODUCTION

American scientist Edward O. Wilson described the sum of humanity's problems as an unfortunate combination of our Palaeolithic emotions, medieval institutions, with godlike technology.² This paper explores the tension between the rule of law, an institution finding its roots in the medieval Magna Carta³ on one hand, and the godlike nature of the technologies of the 4th industrial revolution on the other, specifically considering the impact of social media platforms and digital networks as a type of 'ungoverned space'. This discussion focuses on the experience of Southeast Asian states, intending to include the perspectives of communities outside of the 'global north, the 'global north being the locus where such technology is most extensively developed and deployed. Indeed, communities all over the world constantly engage with social media, even if such technology and platforms are developed and deployed from elsewhere.

The analysis first sets out, in Part II, the working understanding of the 'rule of law' for this discussion – as a kind of 'machinery' developed for a specific socio-political context. This is a functionalist characterization of the rule of law, focused on what the rule of law is intended to achieve and the role it plays, instead of the values and content of the laws it upholds. The analysis then discusses a specific technical limitation of the rule of law – that it can only operate within the specific organizational context of a society where all legal subjects exist in a vertical relationship with sovereign power. With this understanding in place, the question before us is whether and in what ways technology has changed our social context such that the existing 'machinery' that is the rule of law is not as effective as it ought to be in the prevailing context. To address this question, Part III considers how digital networks and social media create spaces that are 'ungoverned' and where the rule of law is unable to operate due to these technical limitations. Part IV then considers the challenges posed by digital networks from the perspective of developing states with different socio-technological contexts from their counterparts in the global north. Specifically, technology developers are more inaccessible, and existing technology is less applicable in their context, thus making it more difficult for states in the global south to establish the rule of law in light of digital spaces. Finally, this paper argues that it is necessary to consider if the rule of law requires reconceptualization, and if so, the role of the 'global south' in such discussions. These are ambitious queries and this paper cannot proclaim any answer or solution to the questions presented. Its purpose is simply to provide a starting point to the discussion on how, and in what ways, the rule of law should be re-conceptualized to suit the prevailing technological context.

II. RULE OF LAW AS MACHINERY

The rule of law is an elusive concept and has no universally agreed definition.

¹ Joseph Raz, "The Politics of the Rule of Law," *Ratio Juris* 3 (1990): 339.

² "Human Nature: Paleolithic Emotions, Medieval Institutions, God-Like Technology," Science & the Big Questions, accessed October 4, 2017, <https://bigthink.com/videos/eo-wilson-what-makes-us-human-paleolithic-emotions-medieval-institutions-god-like-technology>.

³ Brian Tamanaha, *On the Rule of Law: History, Politics, Theory* (Cambridge: Cambridge University Press, 2004), 25.

Fortunately, it is not necessary to delve into its competing definitions as our current purpose is to consider how technology impacts the *operation* of the rule of law rather than its embodied values.⁴ For this discussion, the rule of law is understood in terms of what it *is*, what it *does*, and *how*, by considering its three core themes articulated by Brian Tamanaha: First is that of the sovereign, that is the state and its officials, being limited by law. To Tamanaha, this represents “the broadest understanding of the rule of law, a thread that has run for over 2,000 years”,⁵ the goal of which is the restraint of government tyranny. Second is that there is formal legality, embodying a “rule-bound order established and maintained by government”,⁶ which in turn ensures that the system is predictable. The third is that no one is “subject to the unpredictable vagaries of other individuals”,⁷ and in this way, there is a rule of objective rule-based law, as opposed to a rule of subjective and impassioned man. In considering these three themes, Tamanaha notes that “all three takes on the rule of law... are open with respect to content”,⁸ meaning that they do not impose requirements or expectations as to *what* the law says, emphasizing that “neither democracy, nor individual rights, nor justice is necessarily implicated in any of these themes”.⁹ Building on this analysis and for purposes of this paper, the description of the rule of law afforded by the American Jurist and legal academic Arthur L Goodhart is most relevant here – he describes the rule of law as “*machinery* by which effect can be given to such basic rights as are recognized in any particular legal system”.¹⁰

As a kind of machinery, the effectiveness and usefulness of the rule of law would then be contingent on the prevailing context. Context matters to machines in two ways: First, context determines the specific features of the system – as machines are designed to fulfill certain functions and to meet specific needs, so too the rule of law would have been established (and would subsequently evolve) to address the needs, interests, beliefs, and attitudes of the time, specifically of those controlling the structures of power. The rule of law is, as such, grounded in historical necessity.¹¹ Second, context determines the specific limitations of the system – all machines have limitations, and can only operate effectively under a specific range of circumstances, beyond which they break or lose effectiveness. Joseph Raz alludes to this point in stating that he does not regard the rule of law to be “a universal moral imperative. Rather it is a doctrine which is valid or good for certain types of societies provided they meet the cultural and institutional presuppositions for the rule of law, i.e. those on which the rule of law depends for its success”.¹² In other words, the rule of law can

⁴ This might include, for example, elements of “political morality” and “substantive notions of justice” as discussed in Randall Peerenboom, “Varieties of Rule of Law: An Introduction and Provisional Conclusion,” *University of California School of Law Asian Discourses of Rule of Law Research Paper* no. 03-16 (Los Angeles: Routledge Curzon, 2004): 4, and Simon Chesterman, “An International Rule of Law?” *The American Journal of Comparative Law* 56, no. 2 (2008): 340.

⁵ Brian Tamanaha, *On the Rule of Law: History, Politics, Theory* (Cambridge: Cambridge University Press, 2004), 114.

⁶ *Ibid.*, 119.

⁷ *Ibid.*, 122.

⁸ *Ibid.*, 140.

⁹ *Ibid.*

¹⁰ Arthur L. Goodhart, “The Rule of Law and Absolute Sovereignty,” *University of Pennsylvania Law Review* 106, no. 7 (1958): 945 (emphasis added).

¹¹ Brian Tamanaha explores the evolution of the law and political institutions through the social developments occurring from the Middle Ages through to the Enlightenment in Tamanaha, *On the Rule of Law*, 29-31.

¹² Raz, “The Politics of the Rule of Law,” 331.

only function where the socio-political context is appropriate for it to do so.

A basic contextual element fundamental to the rule of law, and which has informed both its features and its limitations, is the existence of a single “sovereign” – an entity whose “legal authority is not subordinate to any other authority while at the same time it is superordinate over the authority of other associations which carry on their affairs within the territorial boundaries of its jurisdiction”.¹³ If one accepts that the rule of law has its roots in the Magna Carta,¹⁴ then the rule of law has indeed only ever operated in the context where a sovereign, be it a monarch or parliament, reigned supreme. The first two of Tamanaha’s themes of the rule of law discussed above carry the implicit requirement of a sovereign – one that is limited by the law, and that establishes the rule-bound order enabling formal legality. In our prevailing context, the state is the sovereign that establishes the rule of law. The necessity of a sovereign to the rule of law is further made obvious when considering its application in international law: Simon Chesterman notes that ‘the historic challenge for the rule of law [in the conduct of international affairs] has been its relationship to the sovereign. In a domestic legal order the sovereign exists in a vertical hierarchy with other subjects of law’.¹⁵ International law, however, is a matter of ‘peer polities’ instead, where there is no such sovereign, and hence no single dominant actor that determines the interactions between states.¹⁶

With the 4th industrial revolution, is the current configuration of this ‘machinery’ that is the rule of law suited for our current socio-technological context? This line of questioning demands that we scrutinize our assumptions about our socio-political context that has made the rule of law an essential and successful principle (to varying degrees) since medieval times. Of course, the socio-political context is not static, and the context of jurisdiction might evolve such that the rule of law, where it might have previously existed, ceases to be effective or to exist. This phenomenon is most acutely observed in situations of conflict¹⁷ or political instability¹⁸ where a state’s institutions are compromised, thus leading to a collapse of the rule of law altogether. But the socio-political context can also change gradually, without any dramatic shocks to the system. Since the beginning of the 19th century, observers have bemoaned the decline of the rule of law in the west due to various social and political developments involving the state. For example, Dicey viewed the “expansion of administrative action resulting from the developing social welfare state”¹⁹ a dire threat to the rule of law, specifically

¹³ Anthony U. Ezebuio, “Sovereignty and the Rule of Law,” *Journal of Law and Global Policy* 2, no. 1 (2017): 39.

¹⁴ While the ancient Greeks have been credited with developing the notion of the supremacy of law. However Greek philosophy and codified Roman law were largely lost to the West during the first half of the middle ages before being re-introduced around the same time as the Magna Carta. See Tamanaha, *On the Rule of Law*, 18.

¹⁵ Chesterman, “An International Rule,” 350.

¹⁶ Andrew J. Taylor, “Thoughts on the Nature and Consequences of Ungoverned Spaces,” *SAIS Review of International Affairs* 36, no. 1 (2016) (emphasis added).

¹⁷ Pwint Htun, “Beyond the Coup in Myanmar: ‘In Accordance with the Law’ – How the Military Perverts Rule of Law to Oppress Civilians,” Just Security, accessed April 28, 2021, [justsecurity.org/75904/beyond-the-coup-in-myanmar-in-accordance-with-the-law-how-the-military-perverts-rule-of-law-to-oppress-civilians/](https://www.justsecurity.org/75904/beyond-the-coup-in-myanmar-in-accordance-with-the-law-how-the-military-perverts-rule-of-law-to-oppress-civilians/).

¹⁸ As noted by Randall Peerenboom: “Law has its limits, and so does rule of law, conceptually, normatively and practically. Rule of law assumes some degree of separation between law and politics... Revolutions and coups present a particularly difficult challenge for rule of law.” In JPeerenboom, “An Introduction and Provisional Conclusion,” 10.

¹⁹ Tamanaha, *On the Rule of Law*, 64.

in respect of the separation of powers – a feature deemed necessary to the rule of law’s machinery – as various government agencies were established to formulate and execute on policy, while also adjudicating breaches of the same. While characterized as representing the erosion of the rule of law itself, this phenomenon may be better characterized as the socio-political context evolving beyond the original design of this machinery, such that it is no longer able to operate as effectively.

In stark contrast to Dicey’s concerns of an expansionist state, digital spaces challenge the rule of law by limiting the presence of the state by technological means. This diminishes the state’s ability, where it is entitled to do so, to establish the formal legality necessary to the rule of law. The next section provides a brief overview of the nature of the digital spaces and identifies two challenges states face in attempting to establish the systems and processes necessary to give effectivity to their legal systems – first, is the difficulty in establishing a state’s jurisdiction over digital spaces as traditional notions of “jurisdiction” tend to be conceptualized in physical, geographic terms. Second, even where a state has jurisdiction (i.e. *de jure* authority) in respect of such digital space, it may not have the technical capabilities to substantiate such authority and give effect to its policies. The combined effect is that digital spaces bear the characteristics of being ‘ungoverned’ and fundamentally without the rule of law. The limitations of states in digital spaces are due to *technical reasons* rather than any legal limit generated by society and its political institutions and processes. This discussion thus focuses on the technological challenges posed by digital spaces to governments in respect of establishing the rule of law and does not discuss whether such state presence and intervention are desirable, or if they represent an unwarranted overreach of state in a manner deleterious to the rule of law (i.e. where they overreach legal limits). Such analysis is not within the scope of this study.

III.DIGITAL SPACES – NEW TERRAIN WITH NEW CHALLENGES

This section first considers the difficulty of traditional territorial approaches to defining jurisdiction with respect to cyberspace, before considering the technical difficulties states face in imposing their authority and giving effect to their policies in respect of such spaces. As a result, such spaces can be characterized as being ‘ungoverned’, with implications for the rule of law and society, both on and off-line.

A. Challenges to Jurisdiction

It is not the purpose of this study to extensively consider the nature of jurisdiction in digital spaces, but simply to highlight the technical challenges such domains pose when establishing the rule of law. It is thus sufficient to note that online spaces are a new form of terrain, wildly different from the physical geographical spaces that have shaped how “jurisdiction” is conceptualized. Jurisdiction over digital spaces is conceptually difficult as the historical narrative is that “land and territory are so closely associated with the notion of the state they are seldom analyzed separately”.²⁰ In essence, “the power of a sovereign to coerce compliance with legal rules by exercising physical dominion over *person or property* became the central organizing principle of jurisdiction”.²¹ Persons and property are necessarily tied to place. This is not to suggest that states do not actively or successfully regulate digital spaces where it is

²⁰ Andrew J. Taylor, “Thoughts on the Nature and Consequences of Ungoverned Spaces,” *SAIS Review of International Affairs* 36, no. 1 (2016).

²¹ Allen R. Stein, “The Unexceptional Problem if Jurisdiction in Cyberspace” *The International Lawyer* 32, no. 4 (1998): 1169 (emphasis added).

unclear where the relevant persons or property (including intangible property such as IP rights) might “be” in terms of place. States retain de jure authority over online spaces and the various actors that create, operate, and use them. For example, the app/platform providers that create such spaces might be entities incorporated under, and hence subject to, the laws of a specific state. The relationship they have with their users is contractual, articulated by the “terms of use” and “community standards” that users agree to, which are in turn subject to state laws on contract formation and enforcement. The operation of such platforms and the activities thereon are also subject to state laws, whether in respect of digital concerns (such as data protection laws) or general concerns (such as the prevention of hate speech or the publishing of prohibited content, regardless of medium).

Nevertheless, establishing jurisdiction still requires a nexus between the event that occurred in digital space and physical territory or the nationality of the parties involved. While arguably the development of “neo-territorialist”²² jurisdictional rules which predate cyberspace provide a “more-or-less coherent approach to the allocation of judicial authority over cyberspace controversies”,²³ such neo-territorialist approaches continue to tie jurisdiction to a place, albeit “measured by a *more complex relationship* with the defendant than simply the location of his body”.²⁴ The challenge to the rule of law is due to the increased complexity of the relationships involved in digital space which are in turn driven by the nature of the technology that gave rise to the digital interaction in question. This complexity creates uncertainty as to whether and which state has jurisdiction over whatever hardware, software, transaction, interaction, or any of the other numerous constituent components to the platform and the activities it enables. If the rule of law can only be established by a sovereign in respect of its own jurisdiction, then it follows that the rule of law is weak in the digital spaces where state jurisdiction is uncertain.

Even where states have clear jurisdiction and authority, at least two other issues arise with respect to the rule of law in digital spaces. First is the balkanization of legal regimes in cyberspace, resulting in unequal legal protection between different users occupying the same digital space (potentially linked to any number of physical places), depending on the sovereign power responsible for their wellbeing. For example, when GDPR came into force, Facebook and Microsoft seemed to move non-EU users to contract with their American entities such that non-European users outside of the EU would be governed by more lenient US privacy laws instead.²⁵ The second issue is that it is more difficult for a state to effectively exercise power over its jurisdiction in digital spaces than in physical spaces. States typically have direct access to physical spaces to the extent permitted by law and can directly intervene in physical spaces to attain policy goals. For example, to protect personal safety, a state may directly intervene in a physical space by installing fences, streetlights, and surveillance cameras, in addition to penalizing persons who commit crimes. But states typically cannot directly intervene in the design of systems, algorithms, and code in digital spaces in the same way, especially if they lack the requisite technical expertise to understand how such systems and algorithms operate. They are limited to indirect approaches of governance via apprehending the persons who commit crimes in such

²² *Ibid.*, 1170.

²³ *Ibid.*, 1191.

²⁴ *Ibid.*, 1170 (emphasis added).

²⁵ David Ingram, “Exclusive: Facebook to Put 1.5 billion Users Out of Reach of New EU Privacy Law,” Reuters, accessed April 19, 2018, <https://www.reuters.com/article/us-facebook-privacy-eu-exclusive/exclusive-facebook-to-put-1-5-billion-users-out-of-reach-of-new-eu-privacy-law-idUKKBN1HQ00P>.

spaces (if they can identify and assert jurisdiction over such persons) or mandating and relying on other actors (such as the app developers and coders) to implement the necessary safeguards. This assumes that such actors are accessible to them in the first place and that governments can articulate, in technical terms, the specific obligations such actors are expected to undertake. The battle between Apple and the American government over the encryption of data on Apple devices²⁶ is an example of this dynamic, albeit in respect of physical devices. Without commenting on the merits of Apple's commitment to privacy, this example demonstrates that without access to equally sophisticated and expensive technological know-how,²⁷ or unless such technology developers agree to co-operate, a state has limited power to determine how such platforms are operated and the interactions thereon.

Thus, even where governments have clear jurisdiction and de jure authority over digital spaces, there are practical and technical limitations with respect to the exercise of such authority. This directly impedes the ability of states to establish at least the second of Tamanaha's core theme of the rule of law, formal legality, as discussed above. A fundamental attribute of formal legality is that of generality whereby "the law applies, without exception, to everyone whose conduct falls within the prescribed conditions of application".²⁸ The balkanization of the jurisdiction in respect of digital spaces, coupled with the different capacities of states to enforce the different rights afforded to users from their jurisdiction contravenes this attribute of generality specifically in respect of a user's engagements in digital space.

B. Ungoverned Digital Spaces

The lack of clarity around jurisdiction in cyberspace, and the technical challenges states face in asserting and substantiating jurisdiction claimed, renders digital platforms a type of 'ungoverned space'.²⁹ "Ungoverned space" traditionally refers to physical places where "poor governance [has led] the populations of these spaces to render themselves ungovernable by the existing central state"³⁰ and thus, "rule of law serve(s) little or no function".³¹ As more aspects of social, political, and economic life are carried out on digital platforms, the absence of the rule of law in respect of such interactions is cause for concern. In unpacking the ungoverned nature of digital spaces it is important to recognize that un-governmentality does not exist in the absolute, neither does it "imply a power vacuum because there may be different forms and levels of authority exercised by nonstate actors".³² Thus, un-governmentality persists

²⁶ Thomas Brewster, "U.S. Launches Fresh Assault On Apple's 'Warrant-Proof Encryption,'" *Forbes*, accessed January 7, 2020, <https://flipboard.com/@forbes/the-us-just-launched-a-fresh-assault-on-apple-s-warrant-proof-encryption/a-SKbujwL8RqWbUwN64cUZ1w%3Aa%3A3199486-ea0ab00f31%2Fforbes.com>.

²⁷ Thomas Brewster, "Immigration Cops Just Spent A Record \$1 Million On The World's Most Advanced iPhone Hacking Tech," *Forbes*, accessed May 8, 2019, <https://www.forbes.com/sites/thomasbrewster/2019/05/08/immigration-just-spent-a-record-1-million-on-the-worlds-most-advanced-iphone-hacking-tech/?sh=5bba345e5a0a>.

²⁸ Tamanaha, *On the Rule of Law*, 66.

²⁹ Hannah Lim, "Technology and International Law - An Emerging Markets Perspective," *Australian International Law Journal* 25 (2018): 25.

³⁰ Taylor, "Thoughts on the Nature."

³¹ Foreign & Commonwealth Office, "The Link Between 'Ungoverned Spaces' and Terrorism: Myth or Reality?" (United Kingdom: Foreign & Commonwealth Office, 2014), 5.

³² Nicholas Tsagourias, "Non-State Actors, Ungoverned Spaces and International Responsibility for Cyber Acts," *Journal of Conflict and Security Law* 21, no. 3 (2016).

in varying degrees and various forms, depending on the nature and interactions of the various actors jostling for authority and influence over such spaces. Perhaps the most powerful non-state actors in online spaces are the numerous corporate entities that develop and operate the platform. By virtue of having created such spaces and via various design features and IP protection frameworks, these entities collectively control these digital spaces and the interactions thereon. This represents a shift in the balance of power in favor of technology developers, in respect of such spaces, such that the two elements of an effective sovereign, – power and authority – are bifurcated and vested in different entities, thus giving digital spaces the quality of being “ungoverned”.

The discussion thus far has been limited to interactions *within* digital spaces and does not consider how such dynamics in digital space might impact physical spaces.³³ As with physical ungoverned spaces, the impact and ramifications of poor governance in the digital realm do not stop at the metaphorical border that separates the digital world from the physical. In the 1990s, at the dawn of the internet age, observers expected that “our understanding of cyberspace as a discrete place, separate from the molecular world, will eventually give way to a more sophisticated understanding of the Internet as an extension of the broader culture and economy”,³⁴ and that “just as the culture of the Internet becomes permeated by real-world culture, the technology of the Internet falls into place as yet another source of information in the real world”.³⁵ It is beyond the scope of this paper to consider this in-depth, but a few preliminary observations are offered. For example, the use of algorithms in recommendation systems and aggregators on social media have been known to result in ‘filter bubbles and proliferation of fake news, disinformation and propaganda [that affect] the capacity of individuals to form and develop opinions, receive and impart information and ideas and thus impact our freedom of expression’.³⁶ Such trends are driven by private sector actors that prioritize revenue maximization with little regard to whether the content distributed “is objective, factually true, diverse or even relevant”.³⁷ This gives rise to concerns of “risks of bias and unequal representation of opinions and voices”,³⁸ in turn heightening the risk of voter influence, threatening democracy and fair elections. While these developments do not directly impact the rule of law as conceptualized in its three core themes, they nevertheless shape the social context and the issues that the rule of law is intended to address. These changes to the social context in the physical world could result in the relative weakening, and thus a perceived erosion of, the rule of law.

Thus, Part III of this paper has provided an overview of the nature of digital spaces that render it difficult for states, as sovereigns in respect of their jurisdiction, to establish the rule of law – first is the difficulty of conceptualizing jurisdiction over digital spaces to effectively address the concerns arising from interactions in cyberspace. These difficulties subsist even with “neo-territorialist” jurisdictional rules, due to the complexity of the relevant relationships established in respect of

³³ This is analogous to how ungoverned spaces in the physical world “encourage failure in vulnerable states [and]... can transmit unrest from a singular ungoverned space to neighbouring states” as mentioned in Taylor, “Thoughts on the Nature.”

³⁴ Stein, “The Unexceptional Problem,” 1174.

³⁵ *Ibid.*, 1175.

³⁶ Cateljine Muller, *The Impact of Artificial Intelligence on Human Rights, Democracy, and the Rule of Law* (Report, Ad Hoc Committee on Artificial Intelligence, Strasbourg: Council of Europe, 2020): 33.

³⁷ *Ibid.*, 30.

³⁸ *Ibid.*, 45.

digital platforms. This results in the balkanization of jurisdiction. The second is that even where jurisdiction is clear, states are not always able to directly intervene in digital spaces as the power to manage digital platforms and the interactions thereon vest in the non-state entities that create them. Thus, digital spaces can, to varying degrees, be considered a kind of “ungoverned space” where the rule of law does not apply. Ungoverned spaces further impact physical spaces, potentially harming the social context within which the rule of law operates.

These issues represent a displacement of the state as an effective “sovereign”, particularly in respect of digital spaces. In this regard, it is important to recognize and consider that “not all states within themselves are equal in either power or effectiveness”,³⁹ a fact sometimes obscured by the principle in international law of formal equality across states. As such, the “machinery” of the rule of law of different states would differ, each having been adjusted and adapted (with varying degrees of success) to respond to the context and the demands of the community. Part IV of this paper considers the experience of developing states with respect to digital spaces and the technology that enables them, presenting a few examples from Southeast Asia. This is to expand existing discussions around technology and the rule of law to include the experience of the global south, as such discussions generally take the perspective of developed and industrialized states, where such technology is most extensively developed and deployed.

IV. THE PERSPECTIVE OF DEVELOPING STATES

The issues pertaining to jurisdiction and the creation of ungoverned digital spaces, as discussed above, are due to a shift in the nature of technology. While technology development before the internet was limited generally to goods, services, and systems with a connection to and dependency on the physical world,⁴⁰ technological innovation today is distinctly divorced from it. For example, AI exists in software and requires little physical infrastructure to develop and deploy.⁴¹ With the rise of the internet, such technology can be easily accessed anywhere with an appropriate device (such as a smartphone) and internet connection. But despite its virtually incorporeal nature and ubiquity of use, AI still requires extensive capital (including intellectual capital) to develop – thus “many AI-applications are developed and deployed by only a handful of large private actors”⁴² in the global north,⁴³ with far-reaching effects throughout the globe. This section considers two dynamics that arise from the current structures of technological development and deployment. First is that, despite the jurisdiction-confounding nature of digital platforms, the persons and property of technology producers still exist in the physical world in specific geographic clusters, rendering

³⁹ Taylor, “Thoughts on the Nature.”

⁴⁰ For example, the mass production of goods, the development of nuclear and military technology, space exploration, and transportation improvements.

⁴¹ Matthew U. Scherer sums up AI’s attributes as follows: “AI research and development may be discreet (requiring little physical infrastructure), discrete (different components of an AI system may be designed without conscious coordination), diffuse (dozens of individuals in widely dispersed geographic locations can participate in an AI project), and opaque (outside observers may not be able to detect potentially harmful features of an AI system)” Matthew U Scherer, “Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies,” *Harvard Journal of Law & Technology* 29, no. 2 (2016): 355.

⁴² Muller, *The Impact of Artificial Intelligence*, 65.

⁴³ With the usual suspects being Facebook, Google, Amazon, Apple, and Microsoft.

them inaccessible to the governments of developing states. Second, because of this distance and inaccessibility, technology developed in the global north is not always applicable to the context in the global south, resulting in even fewer opportunities for governments of developing states to familiarise themselves with and adapt to such technology. Finally, this section considers how the offline implications of ungoverned digital spaces may manifest in more worrisome outcomes in the global south.

A. Inaccessibility of Technology Producers

As mentioned, the developers of most cutting-edge technologies are typically located in the global north. Thus, governments in developing states have fewer avenues for engagement with such developers. This dynamic persists despite such technology and platforms being deployed in their jurisdictions. In the case of social media, there is already a general concern across governments from all jurisdictions that “political power is concentrated in a few private hands which prioritise shareholder-value over the common good”.⁴⁴ This concern is magnified in situations where “the common good” of a community is obscured to remote developers unfamiliar with local dynamics,⁴⁵ and where regulators are unable to hold such organizations to account. The proximity (or relative lack thereof) of governments to the powerful private technology developers also impacts the former’s ability to understand and manage such technology and its risks.⁴⁶ In this manner, social media platforms and other AI algorithms developed in the global north can erode a developing state’s ability to manage events within their jurisdiction if they remain inaccessible and hence unavailable for dialogue.

While states can always shut off access to such platforms in an ostensible bid to protect their communities, doing so is politically difficult. Such measures would be decried, and likely rightly so, as an attack on freedom of speech and access to information. Users in such states would also suffer, as their lives have undoubtedly improved because of such platforms⁴⁷ that provide superior alternatives to traditional, physical modes of interaction, communication, and accessing information, marketplaces, and financial services. While such technology platforms provide undoubted benefits, lack of oversight and accountability may still result in negative outcomes that manifest more acutely in developing states. In unpacking this problem, the *relative* and *specific forms* of inaccessibility faced by different state governments, with respect to such technology giants, must be considered. This would paint a more accurate and nuanced picture about the quality and nature of the sovereign power of such states – particularly of the power they have (or do not have) over foreign actors that exercise considerable influence on the affairs within their jurisdiction. For example, the ethnic violence that broke out in Myanmar in 2014 has been directly attributed to the spread of misinformation on Facebook. Yet, despite the gravity of

⁴⁴ Muller, *The Impact of Artificial Intelligence*, 52.

⁴⁵ An example is perhaps the violence between Uber and the traditional taxi drivers arising when the ride-hailing app came to Bali, disrupting unspoken rules of the trade structured, in part, to support local communities. See Harrison Jacobs “Why Should We Make Foreigners Rich? Taxi Drivers Are Taking on Uber and Grab in Bali, and Some Are Turning to Violence,” *Business Insider*, accessed June 23, 2018, <https://www.businessinsider.com.au/uber-grab-bali-attacks-taxi-drivers-2018-6>.

⁴⁶ Hannah Lim, “Technology and International Law,” 35.

⁴⁷ For example, the Myanmar government has restricted internet access in parts of the Rakhine state in response to the ongoing conflict resulting in “restricted access to health information, undermining efforts to limit the spread of the coronavirus”. The Asia Foundation, *Violent Conflict, Tech Companies, And Social Media in Southeast Asia: Key Dynamics and Responses* (Washington DC: The Asia Foundation, 2020), 24.

the situation, and the enormity of influence Facebook had in Myanmar (as it was at that time “synonymous with the internet”),⁴⁸ government officials were unable to contact Facebook with their concerns leaving the government with no choice but to block access to Facebook in Mandalay. While this ended the clashes, it finally caught the attention of Facebook officials, who were “concerned over the site being unreachable”.⁴⁹ While Facebook has dramatically improved its responsiveness since 2014, this example demonstrates that in the absence of *effective* systems of accountability specifically designed for the context of developing states, engagement between these governments and foreign technology giants would be dictated, almost entirely, by the latter.

Even where such entities are accessible to governments in developing states, the latter may be hesitant in establishing effective protections for their communities if this might impact national competitiveness: As of September 2019, apart from Singapore, Malaysia, the Philippines, and Thailand, “the remaining countries in ASEAN do not have overarching regulatory frameworks for data protection”,⁵⁰ with weak regulatory mechanisms scattered across different legislation. This is in part attributable to the power imbalance between these foreign technology giants and the state: being a developing region with a burgeoning but nascent digital economy which promises to whisk the region out of its developing status, “ASEAN probably cannot afford to impose harsh punishments like those contained in the [European Union’s General Data Protection Regulation (‘GDPR’)] as its digital economy is just beginning to take off.”⁵¹ As a result, the regulatory frameworks of developing states are likely to be less robust than those in the global north. Usually, it is the legislation of a more powerful sovereign (usually from the global north) that forces technology companies to improve standards for everyone, resulting in a kind of ‘trickle-down’ governance effect. While better than nothing, relying on such ‘trickle-down’ governance alone is unsatisfactory if the values and norms (e.g. privacy, data protection, or digital and communication rights)⁵² asserted by such regulations do not address the needs of, or are incongruent to, communities in developing states. With respect to the [GDPR] for example, commenters have noted that it is “about consent and it’s an approach to privacy that is very European... It’s a values statement”.⁵³ In addition to the questions of *which*, *what* and *whose* norms and values ought to govern online spaces (and for which the lack of coherence leads to the balkanization of the jurisdiction in cyberspace), the current discussion on *how* such norms and values would be given effect in online space must also be considered. The latter requires consideration as to whether the mechanisms and machinery for legal redress are available in their jurisdictions, and to what extent they are effective. For example, users relying on

⁴⁸ Timothy McLaughlin, “How Facebook’s Rise Fueled Chaos and Confusion in Myanmar” *Wired*, accessed June 7, 2018, <https://www.wired.com/story/how-facebooks-rise-fueled-chaos-and-confusion-in-myanmar/>.

⁴⁹ *Ibid.*

⁵⁰ Zaid Ibrahim & Co, “The EU GDPR’s Impact on ASEAN Data Protection Law,” *Financier Worldwide*, accessed September 3, 2019, <https://www.financierworldwide.com/the-eu-gdprs-impact-on-asean-data-protection-law#YOENZxMzZbU>.

⁵¹ The ASEAN Post Team, “Data Protection: Lessons From the EU,” *The ASEAN Post*, accessed December 27, 2018, <https://theaseanpost.com/article/data-protection-lessons-eu>.

⁵² See for example Minna Aslama Horowitz, Hannu Nieminen, and Amit M. Schejter, “Introduction: Communication Rights in the Digital Age,” *Journal of Information Policy* 10 (2020): 299.

⁵³ Kate Fazzini, “Europe’s Sweeping Privacy Rule was Supposed to Change the Internet, but So Far it’s Mostly Created Frustration for Users, Companies and Regulators,” *CNBC*, accessed May 5, 2019, <https://www.cnb.com/2019/05/04/gdpr-has-frustrated-users-and-regulators.html>.

“trickle-down governance” to safeguard their wellbeing in cyberspace are unlikely to obtain any meaningful judicial redress considering the cost barriers and challenges of navigating a foreign legal system.

B. Inapplicability of Existing Technology to Local Contexts

The challenges discussed above are compounded by other factors such as language, cultural and wealth differentials, which operate as barriers to a state effectively managing digital spaces. Taking AI as an example, its development today is “based on the needs and values of nations in which AI is being developed... [and] without control, research on AI is expected to be directed towards AI applications where funding and commercial interests are” – in developed nations.⁵⁴ Its relevance and applicability in other contexts, such as in developing states, are secondary considerations to the profit-seeking goals of private sector developers. Even where there is dedicated effort to develop solutions for developing states, contextual factors can operate as barriers to the adoption and deployment of some types of technology. An example is neural machine translation: use cases relating to human languages are not easily transplantable to countries with languages that are less common. Researchers note that many of the Southeast Asian languages are “low-resource” and “compared to the West, Asian languages have different sources and the spectrum is diverse. The characters of Asian languages are complicated. The lack of corpus also causes difficulties.”⁵⁵ This does not yet account for the additional technical complexities of the linguistic and cultural diversity *within* states. Southeast Asia is one of the most diverse places in the world⁵⁶ making it difficult to effectively adopt or adapt such technology and its applications domestically. This results in even fewer opportunities for a state government to engage, and become familiar, with such technology.

Less exposure to such technology translates to fewer resources to develop an effective understanding of technology-related concerns, and to learn to manage the ensuing implications. But despite this, the technology is still extensively deployed in these jurisdictions by the private sector through e-Commerce, ride-hailing, and gaming platforms, and of course, social media.⁵⁷ This gap between the expertise and capacity of the regulators on one hand, and the extensive use of the technology by the public on the other, can give rise to a responsibility deficit over the digital space created and the interactions thereon. As mentioned above, this is likely to have a greater impact on communities in developing states, as weaker states struggle to assert their authority over transactions and interactions in the digital realm. In some cases, and despite this dynamic, the technology is nevertheless being transplanted and deployed

⁵⁴ As discussed in Ricardo Vinuesa, Hossein Azizpour, Iolanda Leite, Madeline Balaam, Virginia Dignum, Sami Domisch, Anna Felländer, Simone Daniela Langhans, Max Tegmark, and Francesco Fuso Nerini, “The Role of Artificial Intelligence in Achieving the Sustainable Development Goals,” *Nature Communications* 11 (2020): 233.

⁵⁵ Gino Diño, “The State of Neural Machine Translation for Asian Languages,” Sclator, accessed April 23, 2019, <https://sclator.com/features/the-state-of-neural-machine-translation-for-asian-languages/>.

⁵⁶ Rich Morin, “The Most (and Least) Culturally Diverse Countries in the World,” Pew Research Center, accessed July 18, 2013, <https://www.pewresearch.org/fact-tank/2013/07/18/the-most-and-least-culturally-diverse-countries-in-the-world/#:~:text=The%20only%20western%20country%20to,the%20world's%20least%20diverse%20countries.>

⁵⁷ A 2017 survey in Indonesia found that “Facebook is the second most popular social media applications on smartphones, according to 66.5 percent respondents, after Instagram, which is owned by Facebook, with 82.6 percent respondents.” The Parrot, “Indonesia Slapped Facebook With Second Warning Letter Over Data Leak,” The Parrot, accessed April 10, 2018, <https://parrotnewsonline.com/>.

by governments of developing states. An example is Myanmar's facial recognition cameras that were deployed in Naypyitaw by the civilian government a couple of months before the military coup of February 2021. The technology implemented was foreign, provided by China's technology giant Huawei, and the project was implemented by two Myanmar private sector companies. In discussing the project, a senior advisor for the Naypyitaw Safe City project suggested that responsibility for the security of the system rests with the companies: "the good thing is if something happens, it's the companies' responsibility and there's no need for concern".⁵⁸ It is therefore unclear how familiar the civilian government was with the technology, how much control it has over its use, and whether it was equipped to manage potential implications that could arise.

But despite such dynamics of inaccessibility, and the barriers to understanding and adoption, fluency in the technology is nonetheless demanded from governments in the development and deployment of tech-enabled government services to their citizens. This is fast becoming the baseline expectation of digital populations familiar with online platforms. Failure to do so represents a failure of the state in maintaining its capacity and erodes public confidence in institutions. In respect of the rule of law and the justice system, Richard Susskind raises this concern in the context of courts, in that

"it is... hard to conceive for a truly sustainable court system that is not technologically in tune with the communities that it serves. A system whose foundations lie in a print-based world... will soon be out of step with the daily lives of citizens of a digital society. This incompatibility will... reduce confidence in the justice system..."⁵⁹

Thus, the current dynamic of the social systems of technology, as discussed above, of who is developing, deploying, using, and regulating technology in developing countries is more likely to result in these state governments being less effective than their developed counterparts both in managing the attendant risks of technology and delivering public services to their populations in a manner that retains public confidence.

C. Impact on Physical Spaces

As governments in developing states are less effective in both managing technology and harnessing the power of technology to improve engagement with their citizens, they are then also more likely to leave digital spaces ungoverned. While the ungoverned nature of digital spaces and the impact this may have in the physical world is of concern everywhere, developing states may suffer more extreme outcomes due to the prevailing socio-political contexts of their communities. For instance, most post-colonial Southeast Asian states struggle with "ethnic factionalisation".⁶⁰ This is in part due to unique historical and socio-political features such as 'divide and rule' approaches to the colonial administration,⁶¹ which means that at their inception, the

⁵⁸ Nyan Hlaing Lin and Min Min, "Hundreds of Huawei CCTV Cameras With Facial Recognition Go Live in Naypyitaw," Myanmar Now, accessed December 15, 2020, <https://www.myanmar-now.org/en/news/hundreds-of-huawei-cctv-cameras-with-facial-recognition-go-live-in-naypyitaw>.

⁵⁹ Richard Susskind, *Online Courts and the Future of Justice* (Oxford: Oxford University Press, 2019), 84.

⁶⁰ Michael Touchton, "The Dangers of Diversity: Ethnic Fractionalization and the Rule of Law," *Economics, Management, and Financial Markets* 8, no. 1 (2013): 20–40.

⁶¹ A.J. Stockwell, "Conceptions of Community in Colonial Southeast Asia" *Transactions of the Royal*

nation-states of Southeast Asia comprised of various ethnic groups between whom mistrust and suspicion had been engineered, deliberately or otherwise. Furthermore, the borders of these states were determined along colonial boundaries with 'little or no linguistic and ethnic relevance',⁶² and at the time when the right of colonization and territorial conquest was extinguished in international law, ensuring that "those inherited borders became sacrosanct and border changes correspondingly difficult".⁶³ This "[created] potential for conflict based on territorially geographically concentrated disaffected minorities" seeking for the right of self-determination in the post-colonial, modern, world.⁶⁴ In addition, the institution of the "nation-state" expected to unite these various ethnic groups, manage the conflicting demands for self-determination, and establish justice and the rule of law, was "unlike any political entity that had previously existed in the region",⁶⁵ with little continuity to the pre-colonial political structures in the area.⁶⁶

These dynamics would result in the states having, as a starting point, little moral legitimacy and authority in the eyes of significant segments of its population, potentially resulting in the rise of organized groups antagonistic to the state. The impact of ungoverned digital spaces must be considered in such a context, particularly as online spaces can provide the infrastructure, sources of income, and invisibility to such groups – features that have made physical ungoverned spaces conducive for the proliferation of destabilizing forces.⁶⁷ Indeed, insurgent groups can leverage digital infrastructure to bolster their position, via encrypted communication platforms and clandestine fundraising. Moreover, the spread of hate speech and misinformation geared toward mobilizing popular support against the authority of the state is cause for concern.⁶⁸ This dynamic, enabled by digital spaces, has already resulted in forms of organized mass violence in Southeast Asia.⁶⁹

Consideration must also be given to state responses to such developments. States typically respond to challenges to their authority with a show of force. This dynamic applies also to online spaces where "[g]overnment-led conflict mitigation often involves the policing or militarization of online spaces".⁷⁰ An example is in Myanmar in the context of the current military coup – without recognizing the Myanmar military (the Tatmadaw) as the government, security forces at checkpoints would demand civilians to show their Facebook profiles and arrest those with anti-military

Historical Society 8 (1998): 339. In some cases, such as the case of the British in Myanmar, there may not have been an ostensible colonial policy to divide and conquer. Nevertheless, the immediate consequences of the colonial legacy might have been separatism as observed in Samara Yawnghwe, *Maintaining The Union of Burma 1946-1962: The Role of the Ethnic Nationalities in a Shan Perspective* (Bangkok: Institute of Asian Studies, Chulalongkorn University 2013), 68-77.

⁶² Taylor, "Thoughts on the Nature."

⁶³ *Ibid.*

⁶⁴ *Ibid.*

⁶⁵ Yawnghwe, *Maintaining The Union*, viii.

⁶⁶ *Ibid.*, 29. In the case of Myanmar, for example, "far from being a peripheral frontier problem, the ethnic minority crisis is one of the most central issues facing Burma and its neighbors today. All the regions along Burma's 4,016 mile-long land border are inhabited by ethnic minorities, often with historic ties in neighboring states, and armed ethnic opposition groups still police many of Burma's frontier crossings and trade routes." See Martin Smith, *Ethnic Groups in Burma: Development, Democracy and Human Rights* (London: Anti-Slavery International, 1994), 21.

⁶⁷ Taylor, "Thoughts on the Nature."

⁶⁸ The Asia Foundation, *Violent Conflict*, 11

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

posts for the spread of misinformation. The military further uses social media platforms to track and target its critics.⁷¹ But in using power to substitute (rather than substantiate) authority, a state is “bound to fail because not at all times are coercive power necessary and irresistible.”⁷² Indeed the use of force to “[maintain] cohesion too often degenerates into coercion, thereby accelerating fragmentation and frequently ultimately to dissolution of existing governance.”⁷³ The substitution of brute force for authoritative legitimacy to maintain the vertical relationship between the sovereign state and other legal actors is an affront to the first of Tamanaha’s themes of the rule of law which requires that the sovereign is limited by law. This also generates and contributes to social instability that threatens to compromise the state institutions necessary to the rule of law and the overall wellbeing of the population. For example, “in Southeast Asia, where conflicts frequently stem from grievances against an overbearing or authoritarian state, policing the internet can exacerbate the cycle of violence and severely limit civil liberties.”⁷⁴ In some instances, states

“have also launched sophisticated operations employing disinformation techniques to spread messages via fake Facebook accounts and false news stories—in some cases intentionally inflaming communal violence against religious minorities, and in other cases undermining democratic processes.”⁷⁵

The foregoing suggests that another contextual factor to consider is the internal dynamics of the state itself. States are seldom monoliths and the relationship and dynamics between different functions of government, between which the state’s authority and power are distributed and constantly negotiated, should be considered. In the context of Southeast Asia, the role of the military and its antagonistic relationship with civilian governments is also a result of the historical context of ethnic factionalization, incongruous borders, and the extractive and coercive governance systems of the preceding colonial powers. These are dynamics that discussions on technology, the state, and the rule of law must consider, not least because of the increasing use of technology in the military context.⁷⁶

This is not to pass judgment on the merits of the claims of any such group or the decisions of governments as they grapple for control over technology and its effects. The purpose of this example is simply to highlight the importance of understanding digital trends and their impact in their specific socio-political contexts, particularly where such dynamics differ from that in the global north. From such an understanding, we ought to then consider how best to adapt the current construction of the rule of law so that it can be applied effectively to online spaces, bringing the individuals and their interactions under the protection of the rule of law and enhancing the quality of governance over such spaces.

⁷¹ “Five Killed in Myanmar Protests as Junta Cracks Down on Online Critics,” Reuters, accessed April 3, 2021, <https://www.reuters.com/article/us-myanmar-politics-idUSKBN2BQ031>.

⁷² Anthony U. Ezebuio, “Sovereignty and the Rule of Law” *Journal of Law and Global Policy* 2, no. 1(2017): 36-40.

⁷³ Taylor, “Thoughts on the Nature.”

⁷⁴ *Ibid.*

⁷⁵ Benjamin Lokshin and Adam Burke, “In Southeast Asia, Violent Conflicts Move Online,” The Asia Foundation, accessed October 28, 2020, <https://asiafoundation.org/2020/10/28/in-southeast-asia-violent-conflicts-move-online/>.

⁷⁶ For example, the February 2021 military coup in Myanmar will have far-reaching implications on the use of Huawei’s facial recognition cameras in Naypyitaw. How will the government’s use and engagement with such AI, and with Huawei as service providers, evolve should Myanmar revert to military rule?

V. CONCLUSION: THE SOCIO-TECHNOLOGICAL LIMITS OF THE CURRENT CONSTRUCTION OF THE RULE OF LAW

At the dawn of the internet age in the 1990s, observers on jurisdiction and cyberspace noted with optimism that “as courts become more familiar with the technology [of cyberspace], we can expect more sophisticated refinements [in determining jurisdiction over cyberspace issues]”.⁷⁷ This comment underscores the importance of access to and an in-depth understanding of, to the point of *familiarity* with, the technology to effectively address questions around jurisdiction in digital platforms. Thus, whether a state possesses, or has access to, such technical know-how is directly relevant to whether such state will be able to develop sufficient oversight over such areas of digital spaces where it ought to have jurisdiction. From this perspective, the gap in the effectiveness of developed versus developing states becomes clear: unlike their counterparts in the global north, regulators in developing states have more barriers in accessing such information and technical knowledge, they are less likely than their developed counterparts to be able to effectively articulate, define and assert jurisdiction over digital spaces. This paper has argued that the difficulty of establishing the rule of law in a world where digital spaces are becoming increasingly important is due to the inability of states to operate as sovereign in respect of the digital realm. This inability is not due to legal limits determined by appropriate political processes but is instead due to the technological limits arising from the technology of the 4th industrial revolution. These limits manifest more acutely in the global south due to the current social context of how technology is developed and deployed. This is in line with Catelijne Muller’s stipulation for a thorough understanding of the local context when assessing risks around AI, as articulated in their report to the Council of Europe’s Ad Hoc Committee on AI:

“AI systems are more than just the sum of their software components. AI systems also comprise the socio-technical system around them. When considering governance, the focus should not just be on the technology, but also on the social structures around it: the organizations, people, and institutions that create, develop, deploy, use, and control it and the people that are affected by it, such as citizens in their relation to governments, consumers, workers or even entire society”⁷⁸

Not without irony, and if the inherent weakness of the state vis-à-vis technology remains unaddressed, developing states may represent the future of the global north in this new socio-technological context, instead of being “backward” as often construed by prevailing discourse. In the case of the Cambridge Analytical scandal, for example, it was the Philippines “high social media usage and lack of regulation [that made] it lucrative for a company like Cambridge Analytica to test out strategies before implementing them in Western countries with tighter regulations.”⁷⁹ The weaker capacities of developing states “creates an ideal petri dish type situation... where you can experiment on tactics and techniques that you wouldn’t be able to as easily in the West... if it does work, then you can then figure out how to port that into other countries”.⁸⁰

⁷⁷ Stein, “The Unexceptional Problem,” 1191.

⁷⁸ Muller, “The Impact of Artificial,” 9.

⁷⁹ Paige Occenola, “Exclusive: PH Was Cambridge Analytica’s ‘Petri Dish’ – Whistle-Blower Christopher Wylie,” Rappler, accessed September 10, 2019, <https://www.rappler.com/technology/social-media/cambridge-analytica-philippines-online-propaganda-christopher-wylie>.

⁸⁰ *Ibid.*

How would such weaknesses be addressed? The traditional approach to rectifying deficiencies in governance is state-building. However, state-building to address concerns in physical ungoverned spaces has generally proven unsatisfactory.⁸¹ Moreover, while state (re)construction is traditionally described “as a transition from de jure to de facto statehood”,⁸² building state capacity to effectively govern online spaces requires the development of de jure authority over such spaces *in addition* to de facto power. As demonstrated above, de jure authority over the digital realm is not a given. More importantly, state-building does not address the fundamental incongruity between existing notions of jurisdiction – entrenched in physical geographic terms – and the demands of justice in the socio-technological context of a borderless digital world that is rapidly gaining influence. In light of these observations, doubts have been raised as to whether the nation-state, with its medieval equipment such as the rule of law, is the appropriate institution to take us forward into a future shaped by technology.⁸³ Can our existing institutions continue to bring justice and afford us the same protections and benefits as originally intended? The foregoing analysis suggests that they may not.

The fundamental problem is that this technology, along with the trending socio-technological context, disrupts the vertical relationship sovereign states should have with the other legal actors impacting its jurisdiction - ranging from the foreign technology giants to local insurgent groups and individual users wherever they may be. If the vertical relationship cannot realistically be restored, then it is necessary to ask if our current construction of the rule of law has run its technological limits? This should not be a surprising question as all systems and conceptions have their limitations, and the rule of law as we know it today was developed within a specific technological context, to address the requirements of a certain era, using tools and frameworks available at that time. We must pay attention to ‘the historical and political context within which the rule of law was developed’,⁸⁴ and have the courage to recognize when structural and systemic changes render the current framework inappropriate for our needs.

This is not to suggest that we abandon our values and aspirations of what we expect the rule of law to deliver, but rather we must consider what new systems and processes to develop to ensure that these expectations can be effectively met within our new socio-technological context. The approach proposed by Simon Chesterman in crafting an “international rule of law” is helpful, where they call for a “functionalist understanding of how and why the rule of law is *used* – as distinct from the formal

⁸¹ Speaking about state-building in respect of physical spaces, Andrew J. Taylor notes that “*rebuilding central state capacity is seldom an adequate answer, as central government (and its actions) is usually a major reason why these areas became ungovernable and external intervention or involvement is likely to provoke a powerful counter response from within the affected state. Western states and their public opinions (who whilst demanding security have become increasingly sceptical about state building) have shown that they neither have the resources or political will to sustain long-term state building, and that their actions tend to exacerbate already adverse conditions. Moreover, existing unofficial forms of government in these spaces may be in better positions to achieve order and more effective at addressing the local population’s needs than the ‘official’ government*” in Taylor, “Thoughts on the Nature.”

⁸² *Ibid.*

⁸³ See for example Rana Dasgupta, “The Demise of the Nation State,” The Guardian, accessed April 5, 2018, [theguardian.com/news/2018/apr/05/demise-of-the-nation-state-rana-dasgupta](https://www.theguardian.com/news/2018/apr/05/demise-of-the-nation-state-rana-dasgupta), and Mark Lyall Grant, “The Beginning of the End of the Nation State?” Forbes, accessed January 3, 2019, <https://www.forbes.com/sites/marklyallgrant/2019/01/03/the-beginning-of-the-end-of-the-nation-state/?sh=45cc11bb21dc>.

⁸⁴ Chesterman, “An International Rule,” 358.

understanding of what it *means*".⁸⁵ Framing the rule of law as "a tool",⁸⁶ a means to a separate and distinct end, or a piece of machinery as done so here, allows us to consider how the institution was designed to achieve specific goals for a specific context. We can then consider how it might be *re-designed* to address the unique concerns arising in our different, and constantly evolving, contexts. While it is beyond the scope of this paper to articulate the precise contours of such re-design, considering Tamanaha's three core themes of the rule of law as discussed in the introduction can serve as a useful guide. Possible approaches to re-designing the rule of law may include, for example, determining how best to strike the balance between a government limited by law, yet sufficiently empowered to effectively govern technological development and deployment in the prevailing context. What configurations of government (state-level, supranational, or networked) might be best suited to these tasks? Should the notion of jurisdiction evolve beyond territorial, and even neo-territorial, notions to enable such a government to be effective? On formal legality, questions around how to ensure generality, equality of application, and certainty for all users, regardless of where and who they are, can be considered. Considering the remoteness of technology developers and the corporations that deploy them, this may require transferring the burden of accessing the legal remedy from the user to the platform providers. Finally, the third theme may be expanded to read "rule of law, not man, *nor algorithm*", raising considerations as to how to ensure that the decisions and processes that are entrusted to objective reason (represented by the law) and not to subjective passion (represented by man) also not usurped by opaque systems remotely developed to maximize profit. On the other hand, it is also useful to consider how such technology can be a meaningful resource to enhance and expand the coverage, and improve the effectiveness, of the rule of law in both digital and physical spaces.

The foregoing questions suggest that the rule of law may require extensive re-designing, particularly with respect to the role and nature of the sovereign, and conceptions around jurisdiction. Nevertheless, the rule of law is not an immutable principle and Part II above has already alluded to the fact that the rule of law also has the capacity to evolve if it is to be able to adjust to the changing context. Since its medieval beginnings, the rule of law has changed substantially over time to adapt to fluid social, political, and economic requirements. Indeed, this has been the case since its very inception with the Magna Carta, which started out as "the effort of nobles to use law to restrain kings' and eventually evolved 'into the symbol of the struggle against arbitrary power'".⁸⁷ In addition to this evolution, the rule of law has also been consciously and actively *adapted* in attempts to transplant the rule of law, with varying degrees and definitions of success, in connection with various state-building, development, and capacity-building initiatives in the global south. Indeed the debates in the global south on what the rule of law means and the values it ought to represent and attempts at developing "autochthonous"⁸⁸ conceptions of the rule of law are manifestations of communities attempting to build the legal machinery effective to their respective specific contexts. These communities are rich in experience and can provide fresh and useful perspectives to our current global challenges.

In closing, the rule of law was developed in a specific temporal, political, social,

⁸⁵ *Ibid.*, 359.

⁸⁶ *Ibid.*

⁸⁷ Tamanaha, *On the Rule of Law*, 25

⁸⁸ For an example of this discussion, refer to Thio Li-ann, "Lex Rex or Rex Lex? Competing Conceptions of the Rule of Law in Singapore," *UCLA Pacific Basin Law Journal* 20 (2002).

and technological context, to address the needs and aspirations of its time. The task for our technological milieu includes recognizing when the current configuration of this institution can no longer achieve its stated goals and met our expectations. We therefore must build, and learn how to build, new institutions appropriate to our context. This could include reconceptualizing the rule of law to apply to contexts where there is no exclusive or clear sovereign. In doing so, we can learn from developing states, whose development journeys and present struggles with technological trends are both lessons in institution building, and heuristic devices to challenge inherent and misleading assumptions of the nature of technology and its relationship with our governance and justice systems.

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