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EXTRA-LEGAL GLOBAL GOVERNANCE: DISPLACING THE GLOBAL LEGAL ORDER

This panel was convened at 9:00 a.m. on March 31, 2023, by its moderator, David Sloss of Santa Clara University School of Law, who introduced the speakers: Makane Mbengue of the University of Geneva; Rebecca Mignot-Mahdavi of the University of Manchester; Kish Parella of Washington and Lee University School of Law; and Roxana Vatanparast of Capital University Law School.

Internet Infrastructure and Global Politics: The Role of Technical Standards in Digital Global Governance

*By Roxana Vatanparast**

In the area of digital governance, technical standards and standardization strengthen the global governance of communications technologies such as the Internet by helping promote uniformity and the global interoperability of communications technologies. These objectives can be seen, for example, in technical standards set by bodies such as the International Telecommunication Union (ITU), the Internet Engineering Task Force, and the International Organization for Standardization (ISO). Among many others, examples of technical standards include the development of unique identifiers by the Internet Corporation for Assigned Names and Numbers (ICANN), and the Transmission Control Protocol and the Internet Protocol (TCP/IP), which supports the global end-to-end transmission of data packets without differentiation based on content. These standards enable broad use of the Internet globally. Non-governmental organizations and private technical associations have developed a significant role in governance through the development of technical standards, while international organizations such as the ITU have faced diminishing significance in light of liberalization in the 1990s and the role of private corporations.[1]

Employing technical standards as a form of global governance can be traced back to innovations in communications technologies such as the telegraph in the late nineteenth century. These technologies spurred the development of a new institutional form in international law—the international organization—and a new form of governance through standardization. By providing a common framework for the development and use of digital technologies, technical standards significantly enhance the global ordering of the Internet, communications technologies, and global data transmission. However, these technical standards are not merely technical or neutral—they are also normative and political. Technical standards set the conditions for technologies that can be integrated at the global level along with existing infrastructures. Moreover, unequal access to technology and decision-making power in the fora in which technical standards are developed and determined can reflect historical inequalities.

* Assistant Professor of Law, Capital University Law School. Contact: rvatanparast@law.capital.edu.

[1] Heidi J. S. Tworek & Simone M. Müller, *Introduction*, 27 J. Pol'y Hist. 405 (2015).

Technical standards are also the subject of politicized contestation. This can be seen with China's increasing involvement in standard-setting fora, the influence of large tech companies in standard-setting bodies, and the new U.S.-EU Trade and Technology Council, which aims in part to enhance cooperation on technical standards reflecting liberal values.

The global use of technical standards renders digital infrastructures vulnerable to cyberattacks. For example, hackers can feign identity using IP addresses. Technical standards that weaken encryption can render cyberattacks more likely.[2] Moreover, state-sponsored cyberattacks and disinformation campaigns can threaten global governance. These activities target critical infrastructure, elections, and public opinion, with the potential to erode trust and cooperation among nations. Cyberattacks undermine democratic institutions and international norms, and in the process, technical standards can become tools of political manipulation.

While the *Tallinn Manual* discussed cyber operations in international law at length, experts were divided on many issues.[3] State attribution and responsibility are rendered more complex in the digital context. Cyberattacks can be state-sponsored or originate from private parties. Moreover, cyberattacks can be performed through worms (programs that can run independently), originate from multiple jurisdictions, and have effects outside of their intended targets. These actions can undermine global governance by fostering a climate of mistrust and retaliation.

I. The Constructed Boundaries of Legality and Extra-legality

Digital governance and international law are inextricably linked; thus, it is difficult to ascertain a clear line between legality and extra-legality in this domain. The boundaries between legality, non-legality, and extra-legality are often defined and constructed by international lawyers. According to Fleur Johns, "[m]aking extra-legality … entails the legal construction of that which is understood to lie outside the province of international law."[4] In debates on non-legality,

> international lawyers are routinely involved in projecting and shaping conditions that they seem to experience as more political, environmental, economic or innate than legal (according to various understandings of legality). International lawyers then tend to approach these conditions as though they were exogenous to their work.[5]

Digital governance and technical standards are often constructed as extra-legal or non-legal when they are confined to the technical realm to distinguish them from international law and global governance. The authority of law and its jurisdiction is seen as distinct from the jurisdiction of the technical sphere. When international lawyers construct the technical realm as extra-legal, it is a way to disclaim responsibility through claims of non-expertise, which ought to be challenged. We should imagine global governance today as increasingly mediated by and performed through digital technologies and technical standards. International law also plays a role in constructing global informational capitalism, in which technical standards play a strong role.[6] International lawyers must grapple with digital governance and acknowledge responsibility in this domain rather

[2] Michael Rogers & Arlene Luck, *Digital Citizenship and Surveillance: The Snowden Disclosures, Technical Standards, and the Making of Surveillance Infrastructures*, 11 Int'l J. Comm. 22 (2017).

[3] Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations (Michael N. Schmitt ed., 2d ed. 2017).

[4] Fleur Johns, Non-legality in International Law: Unruly Law 10 (2013).

[5] *Id.* at 11.

[6] On the legal construction of informational capitalism through a variety of privileges and immunities, and the corresponding shifts in law by sociotechnical transformations, see Julie E. Cohen, Between Truth and Power: the Legal Constructions of Informational Capitalism (2019). Cohen defines "informational capitalism" as "the alignment of capitalism as a mode of production with informationalism as a mode of development." *See id.* at 19.

than disavow it, and recognize technology, digital governance, and technical standards themselves as normative.

II. Technical Standards as Domains of Struggle in International Law and Global Governance

The evolution of technology often provides the impetus for the reimagination, renewal, and reform of international law. One of the primary challenges today is how to reshape and challenge digital governance in accordance with democratic values. This effort requires reconceptualizing not only governance and normativity but also subjectivities and agency in ways that reflect the governance capabilities of digital technologies and the prominent role of private parties and private ordering. It also requires critically analyzing the ways that digital governance helps shape political communities and reflects and perpetuates social norms, hierarchies, and power dynamics.

Exploring digital governance through the lens of technical standards and infrastructures may offer alternative insights than solely examining formal laws and regulations. If we take an infrastructural perspective on technology and look at the relations it helps shape, we can consider the publics that are impacted by technology as "infrastructural publics," a broader notion of political community than legal publics.[7] Bringing those insights to bear on international law's idea of subjectivity and territorial or state-based notions of political communities might better promote democratic outcomes at various scales of digital governance.

Technical standards will become a critical terrain for the struggle over the future of digital global governance and economic distribution. Standards play a significant role in the commodification of technologies.[8] Additionally, standard-setting fora are increasingly significant sites for "technopolitics."[9] Compliance with technical standards is required for access to networks using those standards, arising to a form of "network power."[10] Alternative technical standards proposed by governments might also be proscribed by international trade law, which prohibits the use of standards that create unnecessary trade barriers.[11] On the other hand, technical standards and standard-setting bodies such as the ISO have the potential to promote social justice in response to consumer rights activist demands as an alternative to more traditional means of making such demands, such as international human rights litigation.[12]

As Julie Cohen has noted, "the contests now playing out within network-and-standard- based legal-institutional settings will determine the structure of the legal system in the emerging, globalized, postindustrial era."[13] This, along with the powerful role of private actors in these domains, requires facing "urgent questions about whether and how network-and-standard-based governance

[7] Benedict Kingsbury & Nahuel Maisley, *Infrastructural & Legal Publics and Publicness*, 17 Ann. Rev. L. Soc. Sci. 353 (2021).

[8] Paul B. Thompson, *"There's an App for That": Technical Standards and Commodification by Technological Means*, 25 Philosophy & Tech. 87 (2012).

[9] *Id.* at 93. While the term technopolitics has a variety of definitions, one useful definition here is: "hybrids of technical systems and political practices that produce new forms of power and agency." Paul N. Edwards & Gabrielle Hecht, *History and the Technopolitics of Identity: The Case of Apartheid South Africa*, 36 J. Southern African Stud. 619 (2010).

[10] *Id.* at 95–96. (*citing* David Singh Grewal, Network Power: the Social Dynamics of Globalization (2008)).

[11] Agreement on Technical Barriers to Trade, Apr. 15, 1994, WTO Agreement: Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 UNTS 120; *see also* Artificial Intelligence and International Economic Law: Disruption, Regulation, and Reconfiguration (Shin-yi Peng, Ching-Fu Lin & Thomas Streinz eds. 2021).

[12] Daniel R. Quiroga-Villamarín, *Standardisation Instead of Litigation: What Can Human Rights Advocates Learn From Consumer Protection at the ISO?*, 28 Australian J. Hum. Rts. 40 (2022).

[13] Cohen, *supra* note 6 at 103.

institutions might be configured differently."[14] Technical standards ought to be taken seriously both as tools of power and potential mechanisms for promoting social justice.

III. Conclusion

Law and technology have much in common: neither is neutral. Both contribute to inequality and injustice and have long historical connections to imperialism and violence. Technology and law reflect and reproduce social, economic, and political values, which can have significant implications for global governance. Moreover, both spheres have lock-in effects—the more they entrench power, the more difficult it may become to challenge them. Nevertheless, their effects are not predetermined—law and technology are critical sites of political contestation.

It is crucial to evaluate the impact of technical standards and digital governance on global governance through an interdisciplinary and historical lens. When considering the co-productive interaction between law, technology, and social order,[15] the histories of both international law and technology can be bridged to challenge and critique traditional conceptions of global normativity and ordering in international legal scholarship. By acknowledging historical power dynamics and hierarchies, questioning conventional assumptions about the neutrality of technology, technical standards, and global ordering, and recognizing the constructedness of distinctions between legality and extra-legality, international lawyers can better evaluate the impact of digital technologies and technical standards and work toward more equitable and democratic forms of digital global governance.

[14] *Id.* at 104.

[15] Sheila Jasanoff, States of Knowledge: the Co-Production of Science and the Social Order (1st ed. 2004).