

AI Governance: the interplay between the local, regional, and global towards a transnational solidarity¹

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Introduction: AI geopolitics

In order to talk about the global governance of AI, it is necessary to reflect on how to combine the national context with the international one⁸.

Milton Santos, a Brazilian intellectual and one of the world's leading academics on the topic of globalization, emphasizes the interdependence between the local and the global, arguing that one does not exist without the other in a way that both influence each other and form a feedback loop⁹. According to Santos, there are indeed spaces of globalization where geopolitics favors some while excluding others based on the virtualities-potentialities of certain groups over others. This seems to be the underlying question of AI governance and the most pressing issue of all

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4 This essay is a textual extended version of T20's co-authors participation in the G20's side-event on "Harnessing Artificial Intelligence for Social Equity and Sustainable Development":

<<https://www.g20.org/en/calendar/side-events/harnessing-artificial-intelligence-for-social-equity-and-sustainable-development>>

5 SANTOS, Milton. For another globalization. Record, 2023.

6 BIONI, Bruno; GARROTE, Marina; GUEDES, Paula. Central themes in AI regulation: The local, the regional, and the global in the quest for regulatory interoperability. São Paulo: Associação Data Privacy Brasil de Pesquisa, 2023.

7 G7 JAPAN. Leaders' Annex: Hiroshima Process International Code of Conduct for Organizations Developing Advanced AI Systems. 2023. Available at: <https://g7g20-documents.org/database/document/2023-g7-japan-leaders-leaders-annex-hiroshima-process-international-code-of-conduct-for-organizations-developing-advanced-ai-systems>. Accessed: 20 May 2024.

8 UNITED NATIONS. Our Common Agenda Policy Brief 5: A Global Digital Compact – An Open, Free And Secure Digital Future For All. Available at:

https://digitallibrary.un.org/record/4011891/files/%5EEOSG_2023_5%5E--EOSG_2023_5-EN.pdf. Accessed: 20 May 2024.

9 OXFORD ANALYTICA. AI global surge creates environmental paradox. Emerald Expert Briefings, n. oxan-db, 2024.

the national and international policy-making forums. So, could this technology avoid making those **who are already peripheral even more peripheral due to the unequal tech-power dynamics**, as has occurred in other moments of our history and that still persist today?

In this context, the current debate should focus on an emancipatory dynamic relationship between local, regional, and global regulatory policies in the context of artificial intelligence (AI). For this reason, it must be recognized that local and regional regulatory initiatives play a key role in shaping technological development and protecting human rights, while the global landscape influences, both negatively or positively, these governance movements through the so-called regulatory, normative, and technical interoperability. Otherwise, AI technological progress would either reproduce or amplify the already existing tech-economic divides.

Key policy areas for social equity and sustainable development

The G20 should promote a global capacity development program catering to the needs of disadvantaged countries of the global south, empowering them to assess the potential social, economic, and environmental impacts of the technologies to mitigate risks and maximise the potential of digital transformation. Local-global strategies should foster and prioritize AIs that promote social equity and, thereby, a human-centric approach to address "the world's greatest challenges, notably but not limited to the climate crisis, global health, and education"¹⁰. In this sense, the United Nations has been pushing for a prioritization related to AI models oriented towards accelerating Sustainable Development Goals (SDGs)¹¹.

The G20 countries must enhance international cooperation on AI grounded in a balance between the protection of vulnerable communities' rights and the dignity of the work that sustains AI systems. Countries should support research about the quality and dignity of data work, the freedom of association of digital workers, and policies on reskilling programs focusing on women and minoritized groups. **The promotion of SDGs should care about the human infrastructure of AI with decent**

10 FAN, Xia. STINCKWICH, Serge. On the Unsustainability of ChatGPT: Impact of Large Language Models on the Sustainable Development Goals. Available at: <https://unu.edu/macau/blog-post/unsustainability-chatgpt-impact-large-language-models-sustainable-development-goals>. Accessed: 20 May 2024.

11 UNITED NATIONS. Governing AI for Humanity: Interim Report. 2023, p.18. Available at: https://www.un.org/sites/un2.un.org/files/un_ai_advisory_body_governing_ai_for_humanity_interim_report.pdf. Accessed: 20 May 2024.

work and quality of life for the citizens. That involves different forms of labor in the AI's lifecycle, including data labeling work and other forms of labor that are outsourced in the Global South.

Global cooperation is also needed to address the so-called AI environmental paradox¹². If, on one hand, AI could be powerful to automatize with high precision deforestation and predict climate disasters, on the other hand, some specific models consume huge volumes of natural resources. Computational complex calculations, especially of large language models (LLM)¹³, have a huge impact on greenhouse gas emissions. That's because it runs on high-performance hardware and large cluster computing infrastructure, which consumes a lot of electricity and water for refrigeration. In addition to considering tax environmental compensation for AI large language models, **G20 should support scientific-interdisciplinary knowledge at a global scale**, similar to the Intergovernmental Panel on Climate Change (IPCC), as the UN's AI Advisory body has proposed¹⁴.

Moreover, G20 countries should consider prohibiting the allocation of public resources to AI systems that perpetuate social injustice. For instance, in countries like Brazil, there has been a significant increase in the implementation of facial recognition technology by law enforcement agencies¹⁵. These AI systems often exacerbate insecurity rather than enhance security, leading to unjust arrests and reinforcing systemic racism, particularly affecting the Black population. Meanwhile, other AI systems with the potential to mitigate police lethality and increase transparency in police operations, such as those integrated with data from police body cameras, have been largely overlooked. Ideally, AI should serve as a tool for counter-surveillance to enhance security for those who have

12 BRAZIL. Federal Government. "We were able to prove the affinity between our governments," said Brazil's Lula about visit of the President of Spain. 2024. Available at: <<https://www.gov.br/planalto/en/latest-news/2024/03/201cwe-were-able-to-prove-the-affinity-between-our-governments-201d-said-brazil2019s-lula-about-visit-of-the-president-of-spain>>. Access on: May 20, 2024.

13 UNITED KINGDOM. Government of the United Kingdom. The Bletchley Declaration by countries attending the AI Safety Summit. 1-2 November 2023. Available at: <<https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023>>. Access on: May 20, 2024.

14 CABLE NEWS NETWORK. "Artificial intelligence could contribute to humanity's extinction, warns new report." CNN, Mar 12, 2024. Available at: <<https://edition.cnn.com/2024/03/12/business/artificial-intelligence-ai-report-extinction/index.html>>. Access on: May 20, 2024.

15 UNITED NATIONS. Digital Library. "Improving the effectiveness of the United Nations: role of youth in peace and security." New York, 2023. Available at: <<https://digitallibrary.un.org/record/4040897?ln=en&v=pdf>>. Access on: May 20, 2024.

been historically marginalized and surveilled, realizing what became known as AI4SG (Artificial Intelligence for Social Goods)¹⁶.

Lastly, international cooperation must encourage the development and use of AI in various languages, echoing recent discussions between Brazilian President Lula and the Spanish Prime Minister¹⁷. **Governing AI extends beyond ensuring safety and trust; it also involves preventing an epistemological divide between the Global South and North.** This requires a collective dedication to leveraging AI for the common good while avoiding the perpetuation of existing inequalities and divisions. True global transformation through AI can only be achieved through inclusive governance and equal access.

The necessary interplay between hard and soft law: from ethical principles to an effective and democratic governance

Recent developments in AI governance underscore the necessity for regulatory measures beyond mere reliance on ethical values and voluntary compliance. The convergence of domestic laws with international frameworks must not only recognize but **trigger an effective governance of the global risks associated with AI.**

As outlined in the G20's AI principles from 2019 and G7's Hiroshima Declaration and Bletchley Declaration¹⁸ in 2023, the recognition of AI's inherent risks that affect all internationally underscores the imperative for coordinated action across borders. In this sense, the US Secretary's recent warning emphasizes the urgent need to regulate AI to prevent it from governing us¹⁹. This aligns with the recent launch of the UN Resolution "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development."²⁰ The Resolution stresses the importance of respecting human rights throughout AI's lifecycle, urging nations and stakeholders to avoid AI

16 BRAZIL. Federal Senate. Committees. "Documents of the Committee on Constitution, Justice and Citizenship." Available at: <<https://legis.senado.leg.br/comissoes/arquivos?ap=8139&codcol=2629>>. Access on: May 20, 2024.

17 PRAINSACK, Barbara et al. Data solidarity: a blueprint for governing health futures. *The Lancet Digital Health*, v. 4, n. 11, p. e773-e774, 2022.

18 MANTELERO, Alessandro. AI and Big Data: A blueprint for a human rights, social and ethical impact assessment. *Computer Law & Security Review*, v. 34, n. 4, p. 754-772, 2018.

19 BIONI, Bruno. Ecology: An Intelligent Narrative for Personal Data Protection in Smart Cities. TIC eGOV 2017: electronic book. 2017. Available at: https://brunobioni.com.br/wp-content/uploads/2019/05/TIC_eGOV_2017_livro_eletronico-55-62.pdf. Access on: May 20, 2024.

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systems that violate human rights or endanger vulnerable groups, both online and offline. Why not G20's impose at least a moratorium against facial recognition for law enforcement purposes, since those systems are amplifying biases and causing even more insecurity than safety for the society?

In the current landscape of AI governance, **there must be a notable shift towards the convergence of domestic hard-law measures with international soft-law frameworks to be oriented on an affirmative logic based on human rights.** Otherwise, there will not be an outline of concrete measures to avoid an oppressive technological wave.

Almost four years ago, UNESCO established the centrality of governance tools such as algorithmic impact assessments. Today, the G20's Digital Economy Working Group is discussing a toolkit for evaluating and mapping AI to improve public services. Locally, at a national level, Biden's Executive Order, the European Union AI Act, and regulatory proposals from Canada and Brazil have made or sought to make such kind of assessment mandatory for AI high risks with public scrutiny. A progressive movement that seeks a local and global type of democratic governance with multi-stakeholder and multidisciplinary network governance.

There are several local and transnational convergence responses that aim at reducing the asymmetry of information at stake. For example, the recent UN AI resolution by proposes the creation of an AI Committee to the EU Digital Services Act and the Brazilian AI Draft Bill²¹ that seek to allow vested research to have data access for a better understanding of algorithms. In this sense, there must **be regulatory interoperability with emphasis on public scrutiny, and, ultimately, societal deliberation to determine what are the acceptable risks and how to maximize the real and not the speculative benefits of AI technologies.**

The aforementioned approach must be built upon the legal tradition rooted in environmental regulation and territorial justice, and, therefore, by advocating for the inclusion of affected voices and vulnerable groups in such governance conversation. Otherwise, there will not be true accountability due to the lack of a public forum to assess if AI's systems pose tolerable global-local risks and real substantive benefits for society.

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In conclusion, the overarching challenge, both nationally and internationally, relies on the scarcity of evidence and collaboration to govern AI and not be governed by it. Addressing this challenge requires multifaceted approaches and collective action. The proposal put forth by the AI High-Level Panel offers a concrete step towards establishing a multilateral body akin to the IPCC, assembling scientists from diverse backgrounds to produce knowledge as a global commons in the realm of AI.

Regulatory interoperability: data governance and an adaptive normative approach

In the context of the Global Digital Compact, the G20 and the UN should establish a common position on data governance and adopt a framework for weighing up the potential benefits and harms of data uses, including AI. To enable the maximum possible public value to be derived from digital transformation, governance instruments should be developed, implemented, and monitored through inclusive and participatory processes. A phased rollout of new governance approaches—starting with sectors such as health—will help to test their benefits in specific contexts, minimize potential harms, and build public trust. The G20 has a collective responsibility to ensure that digital practices improve the lives of all people and that harms are prevented more effectively. Data solidarity provides a blueprint of how to make this happen and offers a framework to align diverse governance approaches towards a common goal²². A set of proposed policy instruments for realizing data solidarity, as well as a tool for assessing the public value of data uses, have been developed and could be readily implemented across all G20 countries.

G20 should also provide a common framework and financial resources for the participatory governance and co-design of such infrastructures, which must be transparent, accountable, interoperable, and preferably open-access. There must be a common understanding and transborder cooperation between the Global North and South for effective data governance maturity. **Strong multi-stakeholder collaboration throughout the entire information lifecycle, through open data policies and a citizen-centered approach, is essential to ensure that public interest drives data (data justice) rather than the contrary.**

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In addition, the G20 should propose regulatory approaches that are flexible and adaptable and are holistic regarding all the components of AI governance, allowing for rapid testing and adjustments in response to chilling effects, emerging risks, and new challenges. By supporting adaptive regulatory frameworks, the G20 can create an enabling environment for innovation while ensuring that AI technologies are developed and deployed in a human rights-respecting, responsible, and ethical manner, thereby advancing the SDGs and meeting the needs of the Global Majority. The G20 must embrace a collaborative, multi-stakeholder approach in AI governance efforts, including the development of standards for industry risk assessment tools. G20 should recommend mandatory algorithmic audits for high-risk AI systems. The G20 should (i) call for a multi-layered impact assessment of AI covering both legal and socio-ethical issues²³; (ii) define best practices for this exercise, including the role of stakeholder participation in co-design of AI systems; (iii) promote transparency in risk management; (iv) elaborate on the legal and socio-ethical component of assessment, relying on universal operational solutions and quantification for human rights impact assessments, while articulating the role of different stakeholders to bridge the gap between regulatory needs and promotion of innovation. This should include the implementation of an innovative risk-opportunity strategy for managing AI's impact on Global South labor markets.

Furthermore, it is important to stress that impact assessments are a means to an end rather than an end in themselves. In this respect, academics and civil society in the majority of the world require resources not only to enforce these mechanisms but also to conduct empirical research based on the evidence they provide. Consequently, both the design of technologies and the research conducted to hold tech developers accountable need to be more representative and community-oriented. For instance, the majority of the world really needs to have its own reference panels and deploy more inclusive qualitative methods that are not being covered by current work in the field.

Conclusion

23 DIAS, Júlia Maria Pereira. JUNQUILHO, Tainá Aguiar. Racismo algorítmico: uma análise sobre os riscos do uso do reconhecimento facial pelos órgãos de segurança pública. In: TIC, Governança da Internet, gênero e diversidade: tendências e desafios. Org. Bia Barbosa et al. São Paulo: Núcleo de Informação e Coordenação do Ponto BR, 2024, p. 125-150.

While technical and regulatory interoperability is essential, their pursuit must be approached cautiously to prevent a resurgence of colonization, where dominant global norms and technical standards stifle local and regional approaches and requirements. Rather, we should strive to establish mechanisms of emancipation and self-determination wherein all stakeholders contribute equitably to the creation of an ecosystem that fosters both innovation and human rights. This approach acknowledges the diversity of values, cultures, and interests involved in AI governance, aiming to strike a balance that encourages responsible technological advancement while safeguarding fundamental rights. Key considerations include:

a) the interconnection between domestic hard law and international soft law rooted in human rights and, more specifically, by exploring the relationship between data justice and inclusive digital transformation. Also, by emphasizing the citizenship-focus nature of the concept taking into account the historical power asymmetries concerning the already existing digital divide and epistemologies in disfavor of the Global South;

b) mandatory algorithmic impact assessment covering both legal and socio-ethical issues for high-risk AI and the implementation of other governance tools to reduce information asymmetry in order to set up democratic governance with public scrutiny;

c) the interplay between global-local regulation and international-national public policies to promote AIs that foster social justice and our most urgent societal problems, notably but not limited to the climate crisis, global health, gender inequalities, information integrity, and decent work.

These values and normative pillars are essential for establishing **AI governance that is not oppressive but rather emancipatory, fostering bonds of solidarity** and ensuring the safe and reliable development and deployment of these technologies from an ecological perspective²⁴. Above all, they aim **to prevent the exacerbation of inequalities and the potential emergence of epistemological apartheid between the global North and South.**

24 FLORIDI, L. et al. How to Design AI for Social Good : Seven Essential Factors. Science and Engineering Ethics, v. 26, n. 3, p. 1771–1796, 2020.