Technology Regulation

Decolonial Data Law and Governance

Siddharth Peter de Souza, Hellen Mukiri Smith and Linnet Taylor

decolonisation, data law, data governance, data justice

S.P.deSouza@tilburguniversity.edu H.W.Smith@tilburguniversity.edu L.E.M.Taylor@tilburguniversity.edu In the introduction to this special issue, we propose a decolonial take on data law and governance across three aspects through the dismantling of hegemonic structures, the embracing of pluriversality and finally the decentering of data and technology. The special issue covers papers that discuss a) what decolonisation means in relation to data law and governance for the digital economy, b) what kinds of methods should be employed to develop data governance frameworks that account for different infrastructural, social, and political contexts, and c) vocabularies and imaginations for how to regulate data, from the majority world. The papers are written from different disciplinary backgrounds of law, science, and technology studies, governance and policy, as well as media studies and present different points of view, and different entry points into the debate. In this piece, we explore ways to place them in dialogue as a plural whole.

1. Introduction

In July 2023, a petition was filed at the National Assembly in Kenya to investigate the welfare of Kenyan workers who have been working for Big Tech companies in outsourced jobs. This emerged after workers who had previously been involved in data labelling work for OpenAI, were found to have worked in exploitative conditions, not just in terms of their wages (2 dollars per hour), but also without necessary preparation or safeguards to deal with the data labelling of violent, racist, and sexist content. The petition highlights the power asymmetries in how the global market centres the interests of platforms over those of workers, and where the largest companies, predominantly located in the minority world, use, commodify and exploit people in the majority world.

This case reflects the globalised dynamics of production in the data and platform economy: data work involving classifying,

- Mercy Sumbi [@MercyMutemi], 'On Behalf of the Young Kenyans Whose Lives Have Been Ruined Because They Did the Dirty Work Training the #ChatGPT Algorithm, We Have Filed a Petition to @NAssemblyKE to Investigate How @OpenAl and @samasource Got Away with Such Exploitation and to Urgently Regulate Tech Work. Https://T.Co/9seeyGKqFM' https://twitter.com/MercyMutemi/status/1678984336996028416 accessed o October 2023.
- Billy Perrigo, 'OpenAI Used Kenyan Workers on Less Than \$2 Per Hour to Make ChatGPT Less Toxic' (2023) https://time.com/6247678/openaichatgpt-kenya-workers/ accessed 8 August 2023.

Siddharth Peter de Souza, Hellen Mukiri Smith and Linnet Taylor - . Tilburg Institute for Law, Technology and Society, Tilburg University. labelling, and checking is commodified and outsourced to areas with precarious living conditions and insufficient leverage on the part of labour and health oversight to guard workers against violations. This form of value production, as Posada argues, continues century old colonial practices of epistemic dominance and extractivism.3 Venezuela, for instance, which is reeling under economic collapse, has become a big producer of cheap labour. In the absence of alternative forms of employment, people undertake manual tasks around data and AI production, such as sorting and tagging, for very low wages, which Hao and Hernandez describe as AI profiteering from catastrophe. 4 The dynamics whereby platforms and other tech firms can access cheap, precarious, and unprotected labour and usership are grounded in histories of colonial dispossession.5 The economic legacy of colonialism has left countries unable to afford the material infrastructures that underpin connectivity and the digital economy, platforms and big tech step in to connect and employ their populations, but under conditions of economic and regulatory asymmetry which so far have not

- Julian Alberto Posada Gutierrez, 'The Coloniality of Data Work: Power and Inequality in Outsourced Data Production for Machine Learning' (2022) https://tspace.library.utoronto.ca/handle/1807/126388 accessed 9 October 2023.
- Karen Hao and Andrea Paola Hernández, 'How the Al Industry Profits from Catastrophe' (MIT Technology Review, 20 April 2022) https://www. technologyreview.com/2022/04/20/1050392/ai-industry-appen-scaledata-labels/ accessed 9 October 2023.
- Abeba Birhane, 'Algorithmic Colonization of Africa' (2020) 17(2) SCRIPTed 389.

delivered the hoped-for economic empowerment.⁶ For instance, large data centres are emerging in the majority world where big tech companies are exploiting lower costs for water, and electricity, and taking advantage of less stringent environmental regulation to create these infrastructures. In Chile and Uruguay, protests emerged in 2023 on account of serious worries about drought, and the implications that such data centres, which consume large amounts of water and energy, will have access to drinking water as well as water needed for agriculture.⁷

This profiteering from people, labour, and lands is rife across the data industry, and as calls emerge to think about the governance of data as a global problem of power and politics rather than a local one of compliance, it becomes important to ground these governance conversations in the political economy of the power that continues to influence them. In this article, we argue that it is impossible to talk about equitable data governance without first talking about decolonising.

We do not speak of decolonisation as a metaphor, but as a process of struggle against models in the data economy that prioritise economic profits, that treat people as resources, that plunder land to extract critical minerals, and that dehumanise the lived experience of communities around the world by commodifying locally-earned knowledge or marketing vulnerability. A telling example comes from the work of Amnesty International in their report Automated Apartheid. The report discusses how facial recognition technology has been used by Israel in the occupied Palestinian territories as a method to control, segregate and determine the ways in which movement, and life takes place for the Palestinian people. By making people hyper-visible, data analytics becomes an instrument of violence and of surveillance, disregarding the embodied agency of a person to decide how they would like data about them to be used. Violence and surveillance are also embodied in the infrastructure that underpins the use of data. In October and November 2023, Israel on repeated occasions cut the internet for 2.2 million people during its ongoing war in Gaza. This has led to frantic efforts by Gazans, politicians, and aid organisations, to access Starlink, a satellite internet provider run by Elon Musk which provides scarce connectivity resources under these conditions of siege. 10 This illustration also demonstrates how digital infrastructures are controlled by large corporations who decide the policy on their use.

- 6 Laura Mann, 'Left to other peoples' devices? A political economy perspective on the big data revolution in development' (2018) 49(1) Development and Change 3.
- 7 Gerry McGovern, 'The Cloud vs. Drought: Water Hog Data Centers Threaten Latin America, Critics Say' (Mongabay Environmental News, 2 November 2023) https://news.mongabay.com/2023/11/the-cloud-vs-drought-water-hog-data-centers-threaten-latin-america-critics-say/ accessed 22 January 2024.
- Joan Lopez Solano and others, 'Governing data and artificial intelligence for all: models for sustainable and just data governance' (2022) European Parliament https://data.europa.eu/doi/10.2861/915401 accessed 23 February 2024.
- 9 Amnesty International, 'Automated Apartheid: How Facial Recognition Fragments, Segregates and Controls Palestinians in the OPT' (2023) https://www.amnesty.org/en/documents/mde15/6701/2023/en/ accessed 18 January 2024.
- Adam Satariano and others, 'With Starlink, Elon Musk's Satellite Dominance Is Raising Global Alarms' (*The New York Times*, 28 July 2023) https://www.nytimes.com/interactive/2023/07/28/business/starlink.html accessed 15 November 2023.

Decolonisation in relation to data cannot be discussed without discussing how to liberate people from everyday dehumanisation that emerges on account of surveillance, digital identity projects, internet shutdowns, and digital divides. As different models of data governance emerge, it becomes imperative to explore how these models reflect the experience and regulatory architecture of the global minority, and in what ways is there a material engagement with the global majority where different values, norms, and categories underpin an understanding of law and of data. It is important to question the different resources and capacities that exist among national institutions to be able to regulate digital infrastructures, and data markets. Further, it is also relevant to examine how the role of the state is imagined differently: through adopting a rights-based approach to regulation, focusing on data localization, encouraging data sharing, or developing digital public infrastructure. This is critical because simultaneously, we are also witness to the way in which technology firms differentiate between geographical regions, depending on the capacities of states to push back and regulate them. In doing so, firms can create spaces of dominance, both in terms of how data is produced and flows, and in terms of how the regulations are challenged - as we were witness to in the conditions of workers on Open AI projects in Kenya.

Our reason for coordinating this special issue is that over the course of the Global Data Justice project (2018-2023) we observed that in the different regions and fields we have studied, emergent threads of theory and discourses relating to data, law and (de) colonisation, and a corresponding growth in the importance of this nexus of research and practice over the five years we have worked together. We have connected with researchers and civil society groups around the world who are articulating a diverse, but theoretically related, set of preoccupations about how law and governance can address the deeply embedded geopolitical, national, and commercial power dynamics inherited from colonial relations, and which are now playing out in the field of technology.

The field of data justice, as it has emerged over the last decade¹¹ has had an off-and-on relationship with decolonial thinking and scholarship. The field has grown in parallel with civil society action and advocacy around issues of social justice, which have always taken into account historic and structural inequities and their interactions with colonialism.¹² Critical Data Studies, one of the genealogical threads that runs through this field, at first adopted colonialism as a metaphor,¹³ then came to engage in a deeper theorisation of the colonial inheritance and reality of data technologies and forms of resistance.¹⁴ This deepening was accompanied by the warning that there is nothing inherently decolonial about a critical take on datafication.¹⁵ As such, the field has gradually come to a more nuanced approach to decolonial thinking.

- Linnet Taylor, 'What Is Data Justice? The Case for Connecting Digital Rights and Freedoms Globally' (2017) 4(2) Big Data & Society 1.
- Seeta Peña Gangadharan and Jędrzej Niklas, 'Decentering Technology in Discourse on Discrimination' (2019) 22(7) Information, Communication & Society 882.
- Jim Thatcher, David O'Sullivan and Dillon Mahmoudi, 'Data Colonialism through Accumulation by Dispossession: New Metaphors for Daily Data' (2016) 34(6) Environment and Planning D: Society and Space 990.
- 14 Stefania Milan and Emiliano Treré, 'Big Data from the South(s): Beyond Data Universalism' (2019) 20(4) Television & New Media 319.
- StefanoCalzati, 'Decolonising "DataColonialism" Propositions for Investigating the Realpolitik of Today's Networked Ecology' (2021) 22(8) Television & New Media 859, 914-929 https://doi.org/10.1177/1527476420957267 accessed 23 February 2024.

Much data justice research and advocacy has been explicitly local, or at least national, because it has close links to advocacy and therefore tends to be rooted in situated and embodied problems of social justice. In contrast, the Global Data Justice project has attempted to engage with partners worldwide who are debating what plural data governance might mean, with the aim of theorising and drawing common threads from these debates.¹⁶

Our starting point has been that the reason for seeking to regulate the data economy on the global level is that data is not merely an economic commodity, but an embodiment of social and geopolitical relations. The data economy mirrors and reproduces human power relations and their historical inequities, and the governance architectures we put in place to shape it are neither neutral nor inevitable. Instead, these arrangements of law, regulation, and governance are choices determined by global economic and political hegemonies. Data law and governance therefore reflect the global status quo even when they are explicitly local and national because they align with assumptions about how data must serve markets, which themselves reflect economic and geopolitical hegemonies in the world.

A decolonial take on data law and governance visibilises these embedded hegemonies and subjects them to critical interrogation. An anti-colonial takes on data law and governance, in addition to this, surfaces and supports routes to resist and remake these hegemonies. It is in this spirit that we began the project of this special issue, and with this hope that we present the following introduction to our colleagues' contributions.¹⁸

In this issue, we have ten papers. They cover a) what decolonisation means in relation to data law and governance for the digital economy, b) what kinds of methods should be employed to develop data governance frameworks that account for different infrastructural, social, and political contexts, and c) vocabularies and imaginations for how to regulate data, from the majority world. The papers offer a variety of approaches: some are country case studies from India, Kenya, Chile, and Brazil, others are comparative studies including between African, Latin American, and Asian contexts, and finally a third set of papers are conceptual and theoretical in nature, offering systematic reflections on data governance, data materiality, and the political economy of data regulation.

The papers are written from different disciplinary backgrounds of law, science, and technology studies, governance and policy, as well as media studies. They present different points of view, and different entry points into the debate. We explore ways to place them in dialogue as a plural whole. We want to link between fields: our audience is people working across those fields who want to emphasise the importance of decolonial thinking in what they do.

- 16 Linnet Taylor and others (eds), 'Data Justice and COVID-19: Global Perspectives' (Meatspace Press 2020) 'Sector Transgressions Archives' (Global Data Justice) https://globaldatajustice.org/gdj/category/sector-transgressions/ accessed 18 January 2024; Linnet Taylor and others, 'Why Are Sector Transgressions so Hard to Govern? Reflections from Europe's Pandemic Experience' (2023) Information, Communication & Society 1; Lopez Solano and others (n8).
- 17 Linnet Taylor and others, '(Re) Making Data Markets: An Exploration of the Regulatory Challenges' (2022) 14(2) Law, Innovation and Technology 355.
- 18 Priyamvada Gopal, 'On Decolonisation and the University' (2021) 35(6) Textual Practice 873.

Most of these papers were workshopped at a Data Power workshop held in Bremen in June 2022 to foster reflections between the group. We are conscious that this special issue comes out at a time when there is an increasing academic co-option of the decolonial agenda, while at the same time, universities continue to adopt neoliberal practices in their operations where engagement with markets and managerial priorities (providing pro bono support to the private sector and co-creating neoliberal policy) is too often prioritised over staff and student welfare. Further, hiring of staff continues to perpetuate racial, classist, casteist, and gendered inequalities, and universities continue to clamp down on freedom of speech when it does not suit their agendas, while at the same time trying to engage in performative decolonisation.¹⁹

This paper is structured as follows. The second section discusses how we understand the concept of coloniality and decoloniality, as well as how this impacts how law is framed, and how data as a concept is used in law and regulation. The third section discusses our approach towards decolonial data law and governance across three aspects through the dismantling of hegemonic structures, the embracing of pluriversality and finally the decentering of data and technology.

The coloniality of data, and of lawOn coloniality

The concept of coloniality is rooted in understanding modernity based on colonial difference and it defines various colonial-like power relations existing today through power structures that continue to sustain colonial relations of exploitation and domination long after the original period of colonialism.²⁰ Coloniality forms the basis and justification for exploitation of the world and its resources by Euro-American systems of domination through what Quijano refers to as the 'colonial matrix of power' or the coloniality of power. Quijano identifies four key levers of coloniality that create such a colonial matrix. The control of the economy through dispossession, appropriation, and control over and exploitation of natural resources and labour, the control of authority (namely institutions), the control of gender and sexuality - education and family, and the control of knowledge and subjectivity.21 This special issue will highlight and discuss ways in which coloniality manifests in the digital economy through control over the economy, institutions, and knowledge.

Important to our conception of coloniality is the ways in which the 'other' is constructed, in terms of how it is understood, engaged with, and subsequently governed. Said in his work on Orientalism speaks of how the idea of the Orient is constructed with an exoticism, and mystique, but done so in an authoritative manner by those located in Europe. The lens for interpreting the 'other' is critical to constructing and examining the circulation of ideas around data law and governance, because it places a requirement and need for western intervention, and knowledge to be able to shape eastern discourses which are seen to be inferior.²² Anghie, in his work on international law and imperialism, speaks of how along with economic and political

- Ryan Quinn, 'Editor Fired After Sharing "Onion" Article on Israel, Hamas' (Inside Higher Ed, 24 October 2023) https://www.insidehighered.com/news/faculty-issues/academic-freedom/2023/10/24/editor-fired-after-sharing-onion-article-israel accessed 18 January 2024.
- The concept was introduced by the Peruvian sociologist Anibal Quijano and further elaborated by scholars such as Quijano, Walter Mignolo, Nelson Maldonado-Torres, Escobar and others.
- 21 Aníbal Quijano, 'Colonialidad del poder y clasificación social' [2000] Journal of World-Systems Research, 168-178.
- 22 Edward W Said, Orientalism (Knopf Doubleday Publishing Group 2014).

violence, the epistemological violence which resulted in legal cultures and tradition being subjugated and inferiorised, resulted in alternative cosmologies being erased. Law, which when framed as international, but rooted in this violence becomes an instrument to further the colonial project.²³ These processes of marginalisation result in not only inferiorising certain forms of knowledge but also subsequently denying groups of people the capacity to be able to participate in knowledge production.

This inferiorisation can be seen in terms of how the regulation of AI or data governance is reported and studied. There is great attention being paid to developments in Europe, the United States, and China, and regulation elsewhere is often analysed through comparison with these jurisdictions. The colonisation of data and technology, and thereby the regulation of it through data law and tech law, is not something that is new but rather is a consequence of a longer arc of regulation that is rooted in a Eurocentric normative universe. In this framework there is an emphasis on the pre-eminence of the state, the importance of markets, as well as values which are claimed to be European and American. As a consequence of this, the choices of legal categories, the functions of institutions, and the relations that are imagined between people all seek to perpetuate a hierarchy of Europe, America and the rest. This is a form of epistemic violence and a key aspect for us in understanding decoloniality. As Spivak asks in Can the Subaltern Speak?, the question is who has the agency to be able to participate in shaping knowledge. Further, it is important to investigate how the ways in which knowledge sharing processes are shaped result in the silencing and co-option of the subaltern voice.²⁴

There is a need, as Chakrabarty argues, to provincialise Europe: to decenter its place as the sole lens to be able to understand history, people, and modernity. Doing so offers the possibility to raise questions about who determines what is universal? Further, it examines how these universal ideas and concepts circulate, and how they become stable, which as Pahuja argues is the process of 'operationalizing the universal'. To challenge these hierarchies of knowledge production it becomes vital to be able to centre voices that have systematically been marginalised, and erased through colonisation. An important example in the digital economy can be seen through the commoditization of privacy, where companies like Apple and Google create privacy-enhancing technology, and therefore offer a technical solution which neatly fits within their business models and obscures the business logics that underpin a surveillance economy.

To us, thinking about coloniality and decoloniality is about both research and praxis. As Smith has argued, 'Decolonizing methodologies are not just about research techniques; they are about transformative praxis and social justice. They require action and engagement beyond the research process to challenge and change oppressive systems and structures.' This emphasis on practice speaks to the need to recognise that decolonisation as a process requires to be

23 Antony Anghie, 'The Evolution of International Law: Colonial and Postcolonial Realities' (2006) 27(5) Third World Quarterly 739.

- 24 Gayatri Chakravorty Spivak, 'Can the Subaltern Speak?' (1988) 14 Die Philosophin 42.
- 25 Dipesh Chakrabarty, 'Provincializing Europe' (Princeton University Press, 2007).
- 26 Sundhya Pahuja, Decolonising International Law: Development, Economic Growth and the Politics of Universality (Cambridge University Press, 2011).
- 27 Linda Tuhiwai Smith, Decolonizing methodologies: research and indigenous people (1999).

'unsettling', as Tuck and Yang have argued.²⁸ This is because it is required to radically shift and destabilise the status quo whether it is in terms of, in the case of regulating the digital economy, how we perceive data, how we imagine data institutions, or how corporations are allowed to function.

Underlying this intention to unsettle and subvert the dominant discourse is to make clear, drawing from Wolfe, that colonisation is not a one-off event but a structure. It is an ongoing and active process that continues to influence how political, economic, social and epistemological choices are being made by people and institutions.²⁹ It is a process which poses an ongoing challenge to examine which kinds of oppressive structures continue to exist in knowledge systems, in economic institutions, in cultural practices, and in relations between people across place and context.

2.2 On the coloniality of framing law and data

Decolonial scholars have defined decolonisation in various ways. Ndlovu-Gatsheni defines decolonisation as an ongoing 'political and epistemological movement'³⁰ while Walsh defines it as a process that seeks to 'make visible, open up, and advance radically distinct perspectives and positionalities that displace Western rationality as the only framework and possibility of existence, analysis and thought'.³¹ Nelson Maldonado Torres defines decolonisation as 'dismantling of relations of power and conceptions of knowledge that foment the reproduction of racial, gender, and geo-political hierarchies of the modern/colonial world'.³² These definitions show that decolonisation is: (a) complex (b) at the core a structural, systemic concern, (c) an ongoing, evolving process that requires constantly challenging systems of power that encourage and facilitate exploitation through data and technologies.

The coloniality of power in law is often demonstrated through the imposition of knowledge systems, values, ideologies, rules, and legal institutions of one state upon another.³³ Such systems are, for example, those that position Western regulatory frameworks as superior in their approach and assumptions, and that deny local contexts through mechanisms such as the Brussels Effect, but also aid systems that continue to give Western countries the power to reproduce geopolitical hierarchies that support exploitation in the name of development. Examples include the World Bank's funding for the export and implementation of technologies such as biometric digital identity systems to global majority countries, and its pushing of policies that focus on the economic benefits of data extractivism, data

- 28 Eve Tuck and K Wayne Yang, 'Decolonization Is Not a Metaphor' (2012) 1 Decolonization: Indigeneity, Education & Society https://jps.library.utoronto.ca/index.php/des/article/view/18630 accessed 18 January 2024.
- 29 Patrick Wolfe, 'Settler Colonialism and the Elimination of the Native' (2006) 8(4) Journal of Genocide Research 387.
- 30 Sabelo Ndlovu-Gatsheni, 'Decoloniality as the Future of Africa' (2015) 13(10) History Compass 485.
- Catherine Walsh and Walter Mignolo, 'On decoloniality: Concepts, Analytics, Praxis' (Duke University Press, 2018) 17.
- Nelson Maldonado-Torres, 'Thinking through the decolonial turn: Post-continental interventions in theory, philosophy, and critique—An introduction' (2011) 1 Transmodernity: Journal of peripheral cultural production of the Luso-Hispanic world, 243.
- Anthony Diala and Bethsheba Kangwa, 'Rethinking the interface between customary law and constitutionalism in sub-Saharan Africa' (2019) 52(1) De Jure Law Journal 189, 199; John Owen, 'The foreign imposition of domestic institutions, International organization' (The MIT Press, 2002) 56(2) International Organization 375.

reuse, repurposing at the expense of social justice.34 Another example is the German development authority GIZ's technical support program for establishing data protection legislation in African countries, 35 which runs in tandem with its technical support program for the digitisation of ID systems in the same African countries.³⁶ In the case of global data regulation, Euro-American rules and legal institutions are forcibly promoted or imposed through mechanisms such as the 'Brussels Effect' and by the structuring of international data brokerage. Patricia Boshe and Carolina Goberna, and Verónica Mery, in their papers in this special issue, 'Is the Brussels Effect Creating a New Legal Order in Africa and Latin America and the Caribbean?' and 'The Chilean Constitution-making Process', respectively, discuss ways in which the EU has in recent years, because of its market size and regulatory power, dominated regulation and standard setting in the tech and data fields through legal transplants. This effect, conceptualised by Anu Bradford, refers to the globalisation of data regulation - the conversion of EU standards into global data rules through the diffusion of EU regulations and policies enacted in Brussels, which often leads to de facto (in reality or practice) or de jure (in law) externalisation of data and technology regulations and standards and accompanying values to other parts of the world.37 Verónica Mery's paper highlights the EU's advisory role in the development of Chile's data protection law, while Bosche and Gobrena give examples of how some African and Latin American countries have used the EU's General Data Protection Regulation (GDPR) as blueprints to develop their own data protection laws.

The externalisation of regulatory frameworks such as the GDPR is often successfully imposed upon global majority countries because they often have no choice but to adopt them in order to protect their economic and trade interests with the EU.38 Decolonial and legal scholars also anticipate that the Brussels Effect could also apply to the EU Digital Services Act package and the upcoming Artificial Intelligence Act,39 legal frameworks that seek to regulate online intermediaries and platforms and gatekeeper online plat-

- 34 Centre for Human Rights & Global Justice, 'Paving a Digital Road to Hell? A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID' (2022); Hellen Mukiri-Smith, Laura Mann, Shamel Azmeh, 'A DC State of Mind? A Review of the World Development Report 2021: Data for Better Lives' (2022) 53(6) Development and change 1421; World Bank, 'World Development Report 2021: Data for Better Lives' (2021).
- 35 GIZ, 'Citizen Engagement and Innovative Data Use for Africa's Development (DataCipation)' https://www.giz.de/en/worldwide/98533. html accessed 22 January 2024; GIZ, 'Citizen Engagement and Innovative Data Use for Africa's Development (DataCipation)' https://www.giz.de/en/downloads/giz2022-en-citizen-engagement-and-innovative-data-use-for-africas-development.pdf accessed 22 January 2024.
- 'Digital Identification in Africa- Diplo Resource' (DiPLO, 19 January 2023) https://www.diplomacy.edu/resource/report-stronger-digital-voices-from-africa/digital-identification-africa/ accessed 22 January 2024.
- 37 Anu Bradford, 'The Brussels effect: how the European Union rules the world' (Oxford University Press, 2019) 68.
- Tomiwa Ilori, 'Contextualisation over Replication: The Possible Impacts of the Digital Services Act on Content Regulation in African Countries' (Verfassungsblog, 2022) https://verfassungsblog.de/dsa-contextualisation-replication/ accessed 14 June 2023; Hellen Mukiri-Smith and Ronald Leenes, 'Beyond the 'Brussels Effect'? Kenya's Data Protection Act (DPA) 2019 and the European Union's General Data Protection Regulation (GDPR) 2018' (2021) 7(4) European Data Protection Law Review 502.
- Charlotte Siegmann and Anderljung Markus, 'The Brussels Effect and Artificial Intelligence: How EU regulation will impact the global AI market' (2022) 5; Tomiwa Ilori, 'Contextualisation over Replication: The Possible Impacts of the Digital Services Act on Content Regulation in African Countries' (Verfassungsblog, 2022) https://verfassungsblog.de/dsacontextualisation-replication/ accessed 14 June 2023.

forms⁴⁰ and to establish the first comprehensive regulatory framework for the regulation of artificial intelligence, respectively.

Scholars argue that the EU is likely to promote the AI Act as a blueprint for the regulation of artificial intelligence by using existing international trade institutions and trade negotiations to introduce requirements that are compatible with the AI Act requirements, thus giving the Act extraterritorial effect.⁴¹ Provisions of the Act are likely to affect businesses and other entities located outside Europe in relation to the AI systems that they provide or use42 raising concerns about risks in regulation where the regulations are adopted outside of the West without contextual grounding through the export of a one- size- fits- all standard for regulation of data, online platforms and AI. There are also concerns about the export of regulatory gaps contained in the EU AI Act to other countries. Human rights organisations have highlighted that the draft EU AI Act does not contain sufficient regulatory safeguards for the protection of rights⁴³ and have called for the EU to, for example, ensure that the EU AI Act contains strong legal limits prohibiting the use of AI for purposes that pose an unacceptable risk to fundamental rights.44 They have also called for the EU, through the Act, to ban the export of prohibited high-risk AI systems manufactured in the EU to third countries. 45 Concerns raised by these organisations

- 40 European Commission, 'The Digital Services Act package' (2023) https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package accessed 15 June 2023.
- 41 Charlotte Siegmann and Anderljung Markus, 'The Brussels Effect and Artificial Intelligence: How EU regulation will impact the global AI market' (2022) 5.
- Graham Greenleaf 'The 'Brussels Effect' of the EU's 'AI Act' on Data Privacy Outside Europe' (2021) 171 Privacy Laws & Business International Report 1, 3-7. For example, Article 2 (1) of the EU AI Act states that the regulation applies to: "providers placing on the market or putting into service Al systems in the Union, irrespective of whether those providers are established within the Union or in a third country (Article 2 (1) (a);" "users of AI systems located within the Union (Article 2 (1) (b)" and "providers and users of AI systems that are located in a third country where the output produced by the system is used in the Union (Article 2 (1) (c)." The EU AI Act defines a 'provider' as "a natural or legal person, public authority, agency or other body that develops an AI system or that has an AI system developed with a view to placing it on the market or putting it into service under its own name or trademark, whether for payment or free of charge (Article 3(1)." A 'user' is "any natural or legal person, public authority, agency or other body using an AI system under its authority, except where the AI system is used in the course of a personal non-professional activity (Article 3(4)." Placing on the market' means "the first making available of an AI system on the Union market Article 3 (9)." The definition of outputs in the Act are provided in the definition of artificial intelligence systems in Article 3 which refers to outputs as 'as content, predictions, recommendations, or decisions influencing the environments they interact with.' (Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on artificial intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts COM/2021/206).
- For example, human rights organisations have expressed concerns that the EU AI Act will not ban a large majority of dangerous biometric mass surveillance practices: Shubham, 'EU Act Will Fail Commitment to Ban Biometric Surveillance' (*Reclaim Your Face*, 2024) https://reclaimyourface.eu/author/shubham/ accessed 23 February 2024.
- EDRi & Access Now, 'EU lawmakers must regulate the harmful use of tech by law enforcement in the Al Act' (EDRi, 20 September 2023) https://edri.org/our-work/civil-society-statement-regulate-police-tech-ai-act/#:~:text=The%20Al%20Act%20is%20an,national%20security%20 authorities%20throughout%20Europe accessed 23 February 2024.
- Natasha Lomas, 'Europe's Al Act talks head for crunch point' (TechCrunch, 2023) https://techcrunch.com/2023/11/14/eu-ai-act-trilogue-crunch/accessed 16 November 2023; Amnesty International, 'EU: Al Act at risk as European Parliament may legitimize abusive technologies' (Amnesty International, 2023) https://www.amnesty.org/en/latest/news/2023/06/eu-ai-act-at-risk-as-european-parliament-may-legitimize-abusive-technologies/ accessed 16 November 2023.

Decolonial Data Law and Governance

are valid because EU developers and deployers of these systems are likely to exploit these regulatory gaps to export prohibited AI systems into global majority countries creating risks to the welfare of citizens and residents in these countries.

It is also important to note that while the EU influences global regulatory frameworks through the Brussels Effect, the United States, the United Kingdom and China are also increasingly setting de facto standards in majority-world countries through technology exports and the establishment by transnational corporations with headquarters or offices there.46 In recent months, the United States and the United Kingdom have been ramping up their efforts to position themselves as global leaders in AI regulation. In October 2023, the White House published an 'Executive Order on 'the Safe, Secure and Trustworthy Development and Use of Artificial Intelligence' on the same day that the G7 group announced separate principles and a voluntary code of conduct for AI developers under the Hiroshima Al Process – the International Guiding Principles on Artificial Intelligence and Code of Conduct for AI developers, respectively.⁴⁷ The aim of these principles and the code of conduct includes reining in generative AI tools such as ChatGPT that dominated headlines in 2023. Not to be left behind, in November 2023, the United Kingdom held a two-day summit on AI safety which saw the launch of the Al Safety Institute and 28 countries including the US, China and EU countries signed a declaration making commitments that they would continue meeting to discuss AI risks in the future.48 The UN has also been adopting a leadership role in the governance of AI. In October 2023, the UN Secretary General-Antonio Guterres launched an Al Advisory Body to support international efforts on the governance of AI. The Body's immediate tasks include, "building a global scientific consensus on risks and challenges, helping harness AI for the Sustainable Development Goals, and strengthening international cooperation on AI governance."49

Mechanisms such as the Brussels Effect or a potential Washington or Bletchley Park effect not only facilitate externalisation of regulatory frameworks, but also the export of Euro-American ideologies, standards, and values that (often)promote exploitation. For example, although the GDPR is arguably an important regulatory framework for the regulation of privacy and data protection, its main function is to promote market interests more than to protect rights. Provisions such as Article 22 which allows for automated decision making in service provision with limited protections, and Articles 44-50 which

- 46 Abeba Birhane, 'Imagining AI: How the World Sees Intelligent Machines' (Oxford University Press, 2020) 247-260; Marta Hernandez, 'Global Gateway and the EU's Digital Ambitions' (CSIS, 2022) https://www.csis.org/blogs/development-dispatches/global-gateway-and-eus-digital-ambitions accessed 16 November 2023.
- European Commission, 'Hiroshima Process International Guiding Principles for Advanced AI system' (2023) https://digital-strategy.ec.europa.eu/en/library/hiroshima-process-international-guiding-principles-advanced-ai-system accessed 16 November 2023; European Commission, 'Hiroshima Process International Code of Conduct for Advanced AI Systems' (2023) https://digital-strategy.ec.europa.eu/en/library/hiroshima-process-international-code-conduct-advanced-ai systems#:~:text=The%20 International%20Code%20of%20Conduct,models%20and%20 generative%20Al%20systems accessed 16 November 2023.
- 48 Ben Wodecki, 'Al Safety Summit: 28 Nations and EU Sign the 'Bletchley Declaration' (Al Business, 1 November 2023) https://aibusiness.com/responsible-ai/ai-safety-summit-28-nations-and-eu-sign-the-bletchley-declaration-#close-modal accessed 23 February 2024.
- 49 United Nations, 'Press Release UN Secretary-General launches AI Advisory Body on risks, opportunities, and international governance of artificial intelligence' (October 2023) https://www.un.org/sites/un2.un.org/ files/231025_press-release-aiab.pdf accessed 25 January 2024.

encourage data transfers to third countries as opposed to data localisation, are all provisions that tend to benefit transnational corporations extracting data from majority-world countries.⁵⁰

The impact of this forcible export of regulatory systems can be seen as a form of denial of other systems of knowledge in the form of data regulation frameworks. This may explain why, as Bosche and Gobrena point out, some countries are pushing back against global regulatory dominance by the EU by inserting protectionist clauses that attempt to serve local needs. The authors cite Rwanda, South Africa, and Nigeria as countries that have included data localisation provisions in their data protection laws; we would add to this list Kenya, which has data localisation provisions in its Data Protection Act 2019 that allow the government to designate categories of personal data that can only be processed locally on grounds of strategic interests of the country.⁵¹ Data localisation, where equitably enforced, can provide an antidote to colonialism or coloniality over digital resources because it limits the free flow of data across borders and thus the commodification of data for profit by multinational corporations and other private sector actors based in the EU, US and China.

In addition to data localisation provisions, Bosche and Gobrena's article also discusses ways in which African states have, through the African Union Convention on Cyber Security and Personal Data Protection 2014 (the Malabo Convention), designed a data protection framework that incorporates local values and needs. For example, the Malabo Convention includes a provision on the regulation of communal data rights and values in Article 8 of the Convention which states that data processing should respect the fundamental rights of natural persons and the rights of local communities. Similarly, the African Union's Data Policy Framework (2022) highlights self-determination on the part of African states with regard to data production and use; regional cooperation in the use of data, infrastructural investment in African countries, and the localisation of data and power as key precepts for the just governance of data.⁵²

As we have suggested in discussions on regulating data markets, and drawing on examples of food and medicine regulation, what might also be good starting points for holistic and effective regulation of data and AI is defining the target of the regulation within each local or national context, identifying what values and risks we are regulating for, from a societal perspective, and regulating the whole data value chain. However, as we note, in our discussions, developing clarity on values and risks of data extraction and trade is not enough for effective regulation especially when geopolitical interests of powerful states and the economic power of transnational corporations remain.⁵³

Data is often conceived of as an economic commodity that is tradable within a market. This conception of data is by far a dominant understanding of data particularly if one examines metaphors such as data being the new oil. Treating data as an economic asset assumes

- Stepehn Spratt and Justin Baker, 'Evidence Report 163: Big Data and International Development: Impacts, Scenarios and Policy Options' (Institute of Development Studies, 2015) 20-21.
- Hellen Mukiri-Smith and Ronald Leenes, 'Beyond the 'Brussels Effect'? Kenya's Data Protection Act (DPA) 2019 and the European Union's General Data Protection Regulation (GDPR) 2018' (2021) 7(4) European Data Protection Law Review 502.
- 52 African Union, 'AU Data Policy Framework' (2022) https://au.int/en/documents/20220728/au-data-policy-framework accessed 12 July 2023.
- Linnet Taylor and others, '(Re)making data markets: an exploration of the regulatory challenges' (2021) 14(2) Law, Innovation 355, 389-391.

importance because it ensures that the purpose for regulation is to address objectives such as furthering economic growth, fostering innovation, and enhancing competition in the market.⁵⁴

7

This proposition that data is a commodity is characteristic of how an understanding of data as something that can be separated from persons and groups has come to pass.⁵⁵ It is not just that the conception of data itself is a function of what large corporations have come to define it by but aligned to this is also the fact that corporations primarily located in the US control computational infrastructures. As a consequence, they not only determine questions of connectivity, but they also become important regulatory players through controlling data access, lobbying, as well as creating forms of self-regulation.⁵⁶

In addition to its economic characteristics, data is also understood as a strategic national asset, where questions of national security underpin how data is collected and used. In this imagination of data, it is used as a key resource for control both in terms of creating surveillance architectures, and also for economic and political control. For instance, whether in China, India, or Russia, there is an emphasis placed on data localisation, and ensuring that policies around data are interwoven with ideas of nationalism, and national interest.⁵⁷

A further aspect of the coloniality of data that we would like to discuss is the question of how data is used as a tool for dehumanisation, and dispossession. A recent report from 972 magazine discusses how AI is being used to create targets for assassination. In the report, the former chief of staff of the Israeli Defence Staff states, 'This is a machine that, with the help of AI, processes a lot of data better and faster than any human, and translates it into targets for attack," Kochavi went on. "The result was that in Operation Guardian of the Walls [in 2021], from the moment this machine was activated, it generated 100 new targets every day. You see, in the past there were times in Gaza when we would create 50 targets per year. And here the machine produced 100 targets in one day." §8

In this report, we are seeing the ways in which data is used as an instrument to target and reduce people to statistics, echoing a refrain from several Palestinian activists who repeatedly emphasise that they are not numbers, but people like any other who have lives, dreams, and aspirations.⁵⁹

It therefore is critical when examining the coloniality of data to account for the ways in which data is used as a tool for dominance, whether it is by markets, corporations, or states. Through domination it has the potential to reshape both material as well as epistemic lifeworlds, and in doing so creates the possibility to make visible as well as invisible, populations, knowledge, cultures, and ways of being and knowing.

- Joan Lopez Solano and others (n8).
- 55 Ibid.
- 56 Ibid.
- 57 Ibid.
- Yuval Abraham, "A Mass Assassination Factory": Inside Israel's Calculated Bombing of Gaza' (+972 Magazine, 30 November 2023) https://www.972mag.com/mass-assassination-factory-israel-calculated-bombing-gaza/ accessed 4 December 2023.
- 59 About' (We Are Not Numbers) https://wearenotnumbers.org/about/accessed 15 November 2023.

3. Towards a Decolonial Data Law and Governance3.1 Dismantling hegemonic structures

Decolonial and constitutionalist scholars have debated whether constitutionalism is a decolonial tool, whether it lives up to decolonial demands that oppose exploitation and other forms of coloniality. 60 Constitutionalism is the idea that state power or authority is defined and conferred by the people through a fundamental law, the Constitution. 61

The primary objective of constitutionalism is therefore, generally, to 'regulate state power through the rule of law commitment and institutions, simultaneously empowering and restraining government action.'62

Several authors in our special issue discuss ways in which constitutionalism can be both a decolonising tool and a colonial tool. These debates are reflected in papers on constitutionalism. Verónica Mery's paper on "Chilean constitutional-making process: a case study in decolonising and reframing digital governance" discusses ways in which decolonising the law can occur through the enactment of locally informed constitutional provisions that promote constitutional rights related to data. She highlights several articles, norms in Chile's proposed Constitution such as Article 3 (96.3) which recognises the right of indigenous peoples and nations to preserve, revitalise, develop, and transmit traditional and ancestral knowledge and Article 96.1 on the right to create, develop, conserve diverse knowledge systems and to enjoy their benefits. Provisions the author argues can help to strengthen the protection of personal data and strip away at digital colonialism. Mery does however acknowledge that constitutions are not always necessarily decolonial in instances when they are the result of elite pacts as opposed to a product of public consultation. Anushka Mittal's paper, on "Constitutionalism as a Way to Decolonize Global Data Law Development," also discusses the complex connection between constitutionalism and imperialism and ways in which coloniality continues with constitutionalism. She gives the example of India's constitution and states that two thirds of its articles were drafted, debated and implemented without any real Indian involvement, and include provisions contained in laws dating from British rule.

There are other examples in the Indian context where constitutionalism does not always guarantee the protection of rights. For example, in the case of India's Aadhaar, one of the world's largest biometric identity programmes, although the Indian Supreme Court in the landmark Puttaswamy judgement⁶³ ruled that privacy was a fundamental right under India's constitution, it nevertheless also ruled that Aadhaar was constitutional. Despite claims by the Indian government that Aadhaar was voluntary, acknowledging the constitutionality of the

- Tshepo Madlingozi, 'Mayibuye iAfrika?: disjunctive inclusions and black strivings for constitution and belonging in 'South Africa' (2018); Ntando Sindane, 'Why Decolonisation and not Transformative Constitutionalism' (2021) 15 Pretoria Student Law Review 236, 251.
- 61 Anthony Diala and Bethsheba Kangwa, 'Rethinking the interface between customary law and constitutionalism in sub-Saharan Africa' (2019) 52(1) De Jure Law Journal 189, 191.
- 62 Michel Rosenfeld and András Sajó, The Oxford handbook of comparative constitutional law (2012) 134.
- Justice K.S. Puttaswamy and Another vs Union of India and Others Writ Petition (Civil) No. 494 OF 2012 https://privacyinternational.org/sites/default/files/2020-09/Justice%20K.S.%20Puttaswamy%20and%20Another%20V.%20Union%20Of%20India%20and%20Others.pdfaccessed 16 November 2023.

system helped to make it mandatory for a large proportion of India's population to surrender their biometrics and other large amounts of data in order to access welfare, without the existence of adequate regulatory oversight over the use of this data. The use of Aadhaar to verify welfare recipients for entitlements such as food rations and fuel subsidies has also excluded marginalised groups who cannot register themselves on Aadhaar from accessing welfare. Additionally, although the Supreme Court ruling limited the use of Aadhaar to the delivery of welfare support schemes and state subsidies, the Indian government successfully enacted the Aadhaar and Other Laws (Amendment) Act, 2019 that now allows for the use of the Aadhaar database by private entities, effectively creating a market for civil registration data.

Notwithstanding concerns surrounding Aadhaar's impact, Aadhaar has over the years garnered praise from the World Bank and the Bill & Melinda Gates Foundation, with Bill Gates announcing in 2018 that the foundation was funding the World Bank's implementation of the Aadhaar approach in other countries. 66 In 2021, the Unique Identification Authority of India, the authority responsible for creating unique identities for all Indian residents through Aadhaar announced that it is working with the World Bank and other United Nations agencies to replicate or export the Aadhaar architecture in other countries. These are other examples of powerful international organisations and international non-governmental organisations' use of aid to export systems used to dominate and control population to other countries in the majority world.⁶⁷ Decolonising law would therefore include critically assessing whether constitutionalism offers needed rights protections or whether it continues coloniality. It would also include dismantling any form of purism and universality in the regulation of data and technology by acknowledging and incorporating pluriversality and dismantling hegemonic structures represented by institutions such as the World Bank and bilateral donors.

These discussions demonstrate the challenges of meeting decolonial demands and dismantling relations of power that Maldonado Torres discusses in his definition of decolonisation. The decolonial project is a structural one because colonialism is structural, continuous, self-replicating, and coercive, imposing normative alterations on local systems. Therefore, while local knowledge systems, norms and

- 64 Vrinda Bhandari, 'Why Amend the Aadhaar Act Without First Passing a Data Protection Bill?' (*The Wire*, 2019) https://thewire.in/law/aadhaar-act-amendment-data-protection accessed 20 July 2023; Silvia Masiero, 'A new layer of exclusion? Assam, Aadhaar and the NRC' (*LSE*, 2019) https://blogs.lse.ac.uk/southasia/2019/09/12/a-new-layer-of-exclusion-assam-aadhaar-and-the-nrc/ accessed 20 July 2023.
- 65 Anand Nupur, 'Who can tap the Aadhaar database? India's private firms are still guessing' (Quartz, 2019) https://qz.com/india/1570568/is-indias-aadhaar-data-only-for-telcos-banks-or-also-fintechs accessed 20 July 2023; Mohul Ghosh, 'Aadhaar Will Be Soon Legal For Banks, Telcos; Aadhaar Mandatory For These 3 Services Now!' (TRAK, 2019) https://trak.in/tags/business/2019/03/01/aadhaar-will-be-soon-legal-for-banks-telcos-aadhaar-mandatory-for-these-3-services-now/ accessed 23 February 2024.
- 66 Privacy International, 'ID Systems Analysed: Aadhaar' (*Privacy International*, 2021) https://privacyinternational.org/case-study/4698/id-systems-analysed-aadhaar accessed 23 February 2024; Anubhav, 'We have funded the World Bank to take this Aadhaar approach to other countries', says Bill Gates' (*Opindia*, 2018) https://www.opindia.com/2018/05/we-have-funded-the-world-bank-to-take-this-aadhaar-approach-to-other-countries-commented-bill-gates/ accessed 22 December 2023.
- 67 'UIDAI working with World Bank, UN to take Aadhaar tech overseas' (*Economic Times*, 2021) https://economictimes.indiatimes.com/news/india/uidai-working-with-world-bank-un-to-take-aadhaar-tech-overseas/articleshow/88057779.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst accessed 22 December 2023.

cultures are important to displace Euro-American centric structures in data and technology governance and regulation, those systems may also express different forms of coloniality.

Therefore, the decolonial law project may need to have at its core dismantling legal structures that promote the coloniality of power, as defined by Quijano and others, which would mean de-linking global data regulation from the tyranny of abstract universalism. De-linking, depending on local contexts, may also entail examining and attempting to differentiate between pre- and post-colonial norms⁶⁸ in attempts to understand norms local communities in majority-world countries value when it comes to regulating data and technologies. Understanding this requires research to understand how data and technologies are governed, and the impact of technology use through people's lived experiences. However, research will need to not impose Euro-American knowledge systems or exploitative agendas. Sebastián Lehuedé's paper, "The Double Helix of Data Extraction: Radicalising Reflexivity in Critical Data Studies' highlights the need for a decolonial approach in critical data studies research. His paper reflects on his study on astronomy data in Chile with the Lickan Antay activists and the need for researchers to have 'radical reflexivity,' in order to identify, expose and address power dynamics in Critical Data Studies research. He proposes more self-scrutiny from researchers, as well as engagement with both positionality, as well as political economy in terms of how research is conducted. This is to ensure that research does not reproduce the same power dynamics it denounces. Edmund Terem in his paper titled "Towards a Human-Centred Approach to Data Extraction" discusses the need to reorient data driven business models towards principles of care, human dignity and beneficence drawing from Ubuntu centred African relational theory. He argues that human rights approaches place more emphasis on individualism and data subjects rather than the contexts within such individuals are subject to data extraction.

The argument of relationality is also put forward by Preeti Raghunath who argues in her paper titled "Critical Data Governance: A Southern Standpoint to the study and practice of data" that in order to decolonise how data is being governed globally, one needs to unsettle the existing status quo such that the unit of global governance is not nation states, or big tech corporations. Rather she argues that what is needed is a relational autonomy between individuals and communities. This will not only recognise a plurality of actors, their values and interests but also investigate who counts when it comes to data governance.

Thinking about the relationships that make up data is a critical component of the paper by diane, titled "Tactics of Earthy Data: Decolonizing the Anthropocene". They discuss the centrality of land in the production of data and argue that data itself is not an unproblematic concept, but one that is deeply connected to people and planetary needs. The paper also argues for a collapsing of material-epistemological categories arguing that the relationships that make up data are based on a series of lively and contingent relationships between land and its people. Doing so, will help expose the exploitative power relations in data production as well as foreground not just human but more than human agency. A decolonial approach would therefore need, in addition to identifying the values and risks attached to the

68 Anthony Diala and Bethsheba Kangwa, 'Rethinking the interface between customary law and constitutionalism in sub-Saharan Africa' (2019) 52(1) De Jure Law Journal 189, 191.

data practices of different entities and advocating for regulating the entire value chain of data, to also include dismantling the geopolitical and economic structures created by powerful states. These would include the aid structures discussed earlier, and transnational corporations which continue to support exploitative practices. It would also include ensuring that the power of states, transnational corporations and other actors come with the global responsibility to ensure the protection of rights.

3.2 Incorporating pluriversality

9

Pluriversality is an understanding that in reality, the world is composed of multiple forms of knowledge, ⁶⁹ acknowledging that we live in "a world where many worlds fit" nd creating space for incorporating counternarratives to Western assumptions of the universal when it comes to regulation of data and technology. Plurality therefore does not only imply "simply tolerating difference, but actually understanding that reality is constituted not only by many worlds, but by many kinds of worlds, many ontologies, many ways of being in the world, many ways of knowing reality, and experimenting those many worlds". ⁷²

Understanding that the world is constituted by many kinds of ontologies and ways of being implies, among other things, acknowledging the place of language in shaping the protection of rights. The path to decolonising law can include designing regulatory frameworks and standards in local languages and sharing knowledge on how to protect one's data rights in local languages so that people impacted by technologies can counter power asymmetries, resist dominant exploitative practices, and liberate themselves.

A complementary theme is that of recognising marginalised people and interests within technological systems. One important theme is the discriminatory effects of technology, which Birhane⁷³ argues reflect geopolitical and colonial hegemonies. She outlines how the current African AI gold rush is fuelled by powerfully extractive logics which rely on the notion of the individual user as rights-bearer with regard to technology, rather than the community and, specifically, historical groupings formed by colonial and other forms of violence. Birhane also points to the consequentialist logics that dominate in technology development and application as a reason why colonialism cannot be brought into focus in African technology policy debates, arguing that where technologists debate how to engage with African societies, the "solutions" sought hardly centre those on the margin that are disproportionately affected'.

On the data governance front, Abebe et al. ⁷⁴ explain how the data-sharing arrangements that support the development of machine learning systems are characterised by 'power imbalances resulting from the legacies of colonialism, ethno-centrism, and slavery, dis-

- 69 Walter Mignolo, 'Introduction: Coloniality of power and de-colonial thinking' (2007) 21(2-3) Cultural Studies 155.
- 70 Arturo Escobar, 'Pluriversal politics: The real and the possible' (Duke University Press, 2012) 9 https://doi.org/10.1515/9781400839926 accessed 23 February 2024.
- 71 Mia Perry, 'Pluriversal Literacies: Affect and Relationality in Vulnerable Times' (2021) 56(2) Reading Research Quarterly 293, 296.
- 72 Amaya Querejazu, 'Encountering the Pluriverse: Looking for Alternatives in Other Worlds' (2016) 59(2) Revista Brasileira de Política Internacional 3.
 73 Birhane (ns).
- 74 Rediet Abebe and others, 'Narratives and Counternarratives on Data Sharing in Africa' [2021] Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency 329.

investment in building trust, lack of acknowledgement of historical and present-day extractive practices, and Western-centric policies that are ill-suited to the African Context.' They argue for qualitative inputs to governing data in the form of narratives, reflecting African oral traditions, in order to surface the embedded histories of technology in land appropriation, apartheid and myriad inequities which lead to the marginalisation of African interests in technology practice and governance.

The theme of narrative, language, voice, and participation is also present in the statement of 48 natural language processing researchers from across the African continent,75 who argue for the concrete, technical inclusion of African voices in technology development. They propose a systemic change in the approach to machine learning systems dealing with language, where currently under-researched and marginalised languages are included and studied, in order to make systems that can speak to, and with, Africans. Although not explicitly a statement about law and regulation, this is a strong argument on the nature of technology governance, which speaks to the work of Abebe, Birhane and others as a practical form of surfacing subaltern discourses and concerns in the form of language itself. For a complementary take on this argument, Nanjala Nyabola in her paper, "Ngugi and Mazrui Revisited: Practitioner Insights into The Role of Language in Decolonising Digitalisation Policy" provides an example of a project she has worked on, The Kiswahili Digital Rights Project, that used Kiswahili as a linguistic tool to decolonise knowledge in digital rights. One of the components for the project included translating key terms in the digital rights space from English to Kiswahili and creating a context for their use by individuals, communities, and civil society organisations so that these individuals and groups can exercise their agency to advocate for their rights more independently within the digitisation sphere. The project has laid a foundation for more robust engagement with individuals, communities, and civil society organisations on emerging digital rights issues in East Africa and there are plans to replicate the programme in Somali and isiZulu.

Decolonial scholars have discussed ways in which colonial violence continues to occur not only through exploitation and appropriation of resources or coloniality of authority, but also, as Ngugi wa Thiongo, Frantz Fanon and Boaventura de Sousa Santos argue, in the realm of knowledge. When local people were forced to substitute local languages or prohibited from using native languages. As Mignolo has rightly argued, "Science' (knowledge and wisdom) cannot be detached from language; languages are not just 'cultural' phenomena in which people find their 'identity'; they are also the location where knowledge is inscribed" This argument is reflected in the paper by Hana Mesquita A. Figueira, Marina Gonçalves Garrote and Rafael A. F. Zanatta, "Regulating Artificial Intelligence in Brazil: the contributions of critical social theory to rethink principles" which calls for the need to pay greater attention to epistemologies of the south and in particular the work of social theorists in Brazil. The authors argue

- Wilhelmina Nekoto and others, 'Participatory Translations of Oshiwambo: Towards Sustainable Culture Preservation with Language Technology' (2022) https://openreview.net/forum?id=BFbg59zVUZc accessed 29 January 2024.
- 76 Boaventura de Sousa Santos, 'Beyond abyssal thinking: From global lines to ecologies of knowledges' (2007) 30(1) Review (Fernand Braudel Center) 45, 51–52; Frantz Fanon, The Wretched of the Earth (New York: Grove Press, 1961), 11; Ngugi wa Thiongo, Decolonising the mind: the politics of language in African literature (East African Publishers, 1992).
- 77 Walter Mignolo, The darker side of the Renaissance: Literacy, territoriality, and colonization (University of Michigan Press, 2023) 669.

that the ways in which the draft of the AI bill is developed ignores complex socio-economic conditions, and places too much emphasis on free market, competition, and innovation. As a consequence, they argue that without critical social theory, which is grounded in Brazil's lived reality, the regulation will continue to be unjust and perpetuate existing power hierarchies, and structural oppressions.

3.3 Decentering data and technology

10

Technology has multiple layers relevant to a decolonial analysis and to practices of resistance, which are reflected in the literature and advocacy, effectively forming multiple interacting domains of decolonial thinking which sometimes speak to each other, but sometimes to debates on rights and resistance that do not centre on technology. Gangadharan and Niklas⁷⁸ argue that this is the best approach, and that we should 'decentre the technology' in order to find the connections to broader forms of injustice. Research aiming to decolonise technology, they argue, 'requires a reflexive turn that decenters data and data-driven technologies in the debate on discrimination to recognize the broader forms of systemic oppression and injustice that yield both unmediated and mediated forms of discrimination'.

One clear instance of this kind of decentering comes from the environmental justice critique of oppressive practices relating to the material geographies of technology. Here scholars have highlighted how the dumping of obsolete and toxic hardware in so-called recycling zones in lower-income countries reproduces the toxicity of colonial relations. Akese and Little⁷⁹ explain the connections between environmental justice and decolonial resistance, arguing that interventions tend to obscure the colonial aspects of environmental degradation, by being 'geared toward amending the visible aspect of harm from e-waste processing without considering the broader post-colonial terrain of plural injustices and violence producing the toxic urban landscape [...] in the first place'.

This thread of decentering the technology while keeping it in view as a mediating factor for colonial forms of injustice is also present in the work of Gurumurthy and Chami, ⁸⁰ who theorise technology governance from a feminist and decolonial perspective, pushing back against what Haraway has called 'the informatics of domination' with proposals on how to formulate data commons under conditions of data sovereignty that can resist the tendency of big tech towards 'cannibalizing the social'.⁸¹ They argue that distributing the economic benefits of the data economy in a more equitable way is inherently tied to processes of recognition and representation, echoing Gangadharan and Niklas' point that equity requires both the recognition of previously marginalised interests, and active incorporation of those interests into the systems that distribute rights and sovereignty over technology and data.

- 78 Gangadharan & Niklas (n12).
- 79 Grace A. Akese and Peter C. Little, 'Electronic Waste and the Environmental Justice Challenge in Agbogbloshie' (2018) 11 Environmental Justice 77.
- 80 Anita Gurumurthy and Nandini Chami, 'Beyond Data Bodies: . New Directions for a Feminist Theory of Data Sovereignty' (2021) . https://itforchange.net/beyond-data-bodies-new-directions-for-a-feminist-theory-of-data-sovereignty accessed 29 January 2024.
- 81 Donna Haraway, 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late 20th Century' in Joel Weiss and others (eds), The International Handbook of Virtual Learning Environments (Springer Netherlands, 2006) https://doi.org/10.1007/978-1-4020-3803-7_4 accessed 29 January 2024.

The literature on decolonising law and governance is complemented by an emerging body of research and theory on decolonising technology. The decolonial project(s) with regard to technology focus(es) on different layers and systems: data and its ownership or non-proprietary nature. As Sebastian Leheude argues in this issue; data derivatives, for example the ability to make people, communities, processes, and resources legible and governable to non-local actors, and how this process tends to follow the geopolitical and economic lines of former colonial relations; a material infrastructures of connectivity and their effects on market-making; and finally claims of sovereignty over the whole assemblage or over its constituent parts.

Claims of technological or data sovereignty can be hegemonic even when framed in terms of anticolonial politics, as Kushang Mishra discusses in his paper titled "Data as a national asset: What does seeing data in terms of an asset reveal about the postcolonial state in India? For example, the Indian state's claim to sovereignty also asserts a domestic hegemony over data that can be oppressive for marginalised groups. 85 Such an assertion of sovereignty, however, can also constitute pushback against open attempts to co-opt political processes. These attempts are made in particular by co-opting the infrastructures - digital and material - on which those processes increasingly take place, as Preeti Raghunath argues in her paper. Indigenous sovereignty scholars have for years discussed the idea of data as something that is living. In their work, they argue that data is inseparable from people, and therefore one needs to be able to centre a person's or collective's autonomy in thinking about data. There is no such thing as raw data. Instead, it is built on the lives, labours, and experiences of people.

Conclusion

Overall, what we see in current research and practice on decolonising technology is highly diverse. A common argument, however, is that community and the commons are not reflected in current technology development and governance, ⁸⁶ leading to analyses that address the practical implications of this for creating change. The literature reflects multiple viewpoints, from the economic, material, and infrastructural layers to the digital layer, where critiques of computational and statistical methodologies show how they scaffold the ways in which computing reproduces both historical and present dynamics of oppression and violence.

At the core, decolonisation is achieved through undoing colonial mechanisms: geopolitical structures that control economies, knowledge, language, culture, and politics, and that also shape the regulation of data and technology. This includes adopting a critical view of the governance and regulation of Al and data systems - identifying and interrogating the centres of power that encourage the exercise of authority, dominance and exploitation through technology and data, and rejecting or resisting these centres. This can take the form of resisting the blind importation of technologies, standards, and regulatory frameworks into countries; the imposition of global responsibil-

- 82 Linnet Taylor and Dennis Broeders, 'In the name of development: Power, profit and the datafication of the global south' (2015) 64 Geoforum 229.
- Nick Couldry and Ulises Mejias, 'The decolonial turn in data and technology research: what is at stake and where is it heading?' (2023) 26(4) Information, Communication & Society 786.
- 84 Payal Arora, The next billion users: Digital life beyond the West (Harvard University Press, 2019).
- Revati Prasad, 'People as data, data as oil: the digital sovereignty of the Indian state' (2022) 25(6) Information, Communication & Society 801.
- 86 Lopez Solano et al (n8).

ity on dominant countries, international organisations and corporations to ensure that the export of technology and regulation promotes social justice aims; and rejecting the notion that Euro-American knowledge systems are superior and are needed to inform regulation of data and technologies in all other countries.

This last form of resistance needs to include reframing and resisting prevalent discourses on modernity and development as conceptualised by global minority countries and promoting pluriversalism - the only way to ensure that local knowledge systems, languages, values, and norms inform the use of technologies and the regulation and governance of data.

Acknowledgments

We would like to thank Aaron Martin for his support and feedback in shaping this special issue, and for providing advice through its development. We would also like to thank Ronald Leenes who encouraged the curation of the special issue and enabled its publication through much generosity and patience.

The work of the Editors was supported by ERC Grant Agreement n° 757247.

Copyright (c) 2024, Siddharth Peter de Souza, Hellen Mukiri Smith and Linnet Taylor.



Creative Commons License

This work is licensed under a Creative Commons Attribution-Non-Commercial-NoDerivatives 4.0 International License.