DFRLab

DIGITAL IDENTITIES AND BORDER CULTURES

Nanjala Nyabola

Author

Nanjala Nyabola

Editors

Rose Jackson
Iain Robertson

Cover Image

Boniface Maina, Artificial Connection, 2022
Reprinted under license.

The mission of the **Digital Forensic Research Lab (DFRLab)** is to identify, expose, and explain disinformation where and when it occurs using open-source research; to promote objective truth as a foundation of government for and by people; to protect democratic institutions and norms from those who would seek to undermine them in the digital engagement space; to create a new model of expertise adapted for impact and real-world results; and to forge digital resilience at a time when humans are more interconnected than at any point in history, by building the world's leading hub of digital forensic analysts tracking events in governance, technology, and security.

The **Democracy + Tech Initiative** creates policy practices that align global stakeholders toward tech and governance that reinforces, rather than undermines, open societies. It builds on the DFRLab's established track record and leadership in the open-source field, empowering global communities to promote transparency and accountability online and around the world. The Initiative examines how the tech that connects and informs people is funded, built, and governed, and how that affects the viability of rights-respecting and democratic societies around the world.

- The Initiative is designed to:
- Center human rights and democracy in tech and policy debates;
- Shape what happens next by looking beyond the current tech and democracy flash points;
- Ensure decisions about global tech include equities and stakeholders around the world;
- Connect and align siloed communities and issues in government, industry, and civil society; and
- Elevate a new generation of diverse leaders with crosscutting expertise to shape policy and industry outcomes.

January 2023

DIGITAL IDENTITIES AND BORDER CULTURES

The Limits of Technosolutionism in the Management of Human Mobility

Nanjala Nyabola

Contents

Introduction

In August 2022, British anti-surveillance group Privacy International filed a complaint against the United Kingdom (UK) government for the use of GPS tagging and ankle monitors on refugees and migrants arriving in the country via the Channel.[1] The group argued that the practice—leveraging tactics used to manage criminal populations—traumatizes and stigmatizes refugees and migrants, and by extension, criminalizes the search for asylum.[2] Some of the victims of the practice asserted that it made them feel "like prisoners," and others showed psychological impacts such as reluctance to engage with outsiders or even to leave their homes.

This is just one of the many instances of the growing use of technology to manage refugee and migrant populations around the world. In 2021, there were an estimated 281 million migrants globally, comprising: refugees and asylum seekers; students; those fleeing environmental and natural disasters; and those who relocated for employment or leisure.[3] By this count, an estimated 3.6 percent of the world's population was on the move in one year—the highest in history and a rate likely to continue if circumstances remain unchanged.

Policymakers and analysts have interpreted data on the rising number of global migrants and refugees to mean that there is a crisis underway that requires increasingly elaborate methods of policing and control, leading many to turn inward toward law enforcement or security-based technologies. However, data and research suggest that there is not so much a crisis of migrants as there is a crisis within policymaking, where the humanitarian instinct to protect those in search of safety and opportunity is being displaced by a desire to project power at the expense of vulnerable populations. Without critical evaluation of these claims, governments are increasingly accepting, normalizing, and indeed championing claims about fears of invasion and replacement that are, by extension, making dangerous room for extremist rhetoric that undermines democracy globally. Put differently, the absence of policy space for humane conversations around refugees and migrants is directly undermining democracy.

Technology has become a major mechanism to manage the movement of people both domestically and internationally, triggering ethical debates about its impact, particularly when employed by democratic governments in ways that are at odds with universal human rights. Countries are deploying tools to address the questions of digital citizenship and digital identity, but the leap between legal and technical definitions of identity is not insignificant and has major social implications, as discussed here. The rise of *technosolutionism*, or reliance on technology to solve complex social and political issues better suited to social approaches, reinforces exclusionary ideologies such as ethnonationalism and racism. That same technology, developed in securitized immigration contexts with fewer legal protections, is then often redeployed more broadly within democratic societies, or sold overseas to governments with less responsive governance structures, muddying citizens' expectations of due process, civil rights, and democratic protections. This paper intends to better inform the conversation around technology's impact on democracy by evaluating technosolutionism and its application to the management of human mobility.

---

1   Isobel Cockerell, "'Crazy Invasive Technology': UK Faces Legal Challenge for GPS Tagging of Migrants," Coda Story (news platform), August 18, 2022, https://www.codastory.com/authoritarian-tech/surveillance-uk-migrants-gps-trackers/.

2   Cockerell, "'Crazy Invasive Technology.'"

3   "World Migration Report 2020," UN International Organization for Migration (website), accessed May 2, 2022, https://worldmigrationreport.iom.int/wmr-2020-interactive/.

Defining Technosolutionism

Technosolutionism is a portmanteau that refers to the tendency to deploy technology toward all social and political challenges, generally with insufficient efforts to explore less expensive approaches first.[4] It suggests that we, rather than deeply engaging with the most urgent questions of our time, instinctively reach for purely technical solutions geared toward efficiency over more human values like tolerance or sympathy to local contexts. It points to the deification of technology in public life, where those who build technology are feted as geniuses in business, and therefore automatically moral leaders within the society at large. Technosolutionism implies a dismissiveness of the hard work required to address social problems through social means, framing them instead as data issues that can be turned into code and solved using algorithms.

The opposite of technosolutionism is not technophobia. Advocating for sobriety and restraint in the application of technology to complex social and political contexts is not rejecting the possible utility of technology in supporting broader efforts to address these problems. For example, the role of technology in enhancing coordination and information sharing is critical. The opposite of technosolutionism is instead a reminder that society is dynamic, that circumstances change rapidly, and that technology is not inherently neutral even if it attains the highest standards of technical capability. Indeed, technology is an intensifier and any momentum already present in the analog world will automatically be intensified by the application of technology to that context. Therefore, if a government has demonstrated

genocidal intent against minority populations, using digital ID technology will not automatically eliminate that genocidal intent. Rather, it routinely intensifies it, as governments seek to codify the language of exclusion into code that is then presented as neutral.

The experience of numerous populations in the Global South proves this particular outcome. For instance, India's National Register of Citizens and its Aadhaar digital ID system (a biometric identity program linked to the welfare system and provision of social services) has intensified marginalization of the country's Muslim and poor rural populations.[5] Similarly, the experiences of the Rohingya in Myanmar and Bangladesh show that intent to exclude can follow minority populations across international borders when national governments share data.[6] The selective implementation of invasive digital data collection regimes on refugees without proper oversight also demonstrates how anxieties around "invasion" can intensify such regimes.[7] In cases like these, governments failed to address the underlying challenges of inclusion and integration through their embrace of technosolutionism, and instead heightened the exclusion and marginalization of minority populations.

Refugee populations are particularly important populations to consider when thinking about the impact of technosolutionism. The British example of using GPS tagging and ankle monitors on refugees and migrants is just one of many. In a 2020 report, the European Digital Rights Initiative affirmed that European governments regularly experimented

---

4   See, for example, Evgeny Morozov, *To Save Everything, Click Here: The Folly of Technological Solutionism* (New York City: Public Affairs, 2013).

5   See Reetika Khera, ed., *Dissent on Aadhaar: Big Data Meets Big Brother* (Himayatnagar, India: Orient Blackswan, 2018); Saif Khalid, "Harassed, Discriminated: Story of Assam's Bengali Origin People," *Al Jazeera*, June 23, 2018, https://www.aljazeera.com/features/2018/6/23/harassed-discriminated-story-of-assams-bengali-origin-people; and Elida K. U. Jacobsen and Ursula Rao, "The Truth of the Error: Making Identity and Security through Biometric Discrimination," in *Bodies as Evidence*, eds. Mark Maguire, Ursula Rao, and Nils Zurawski (Durham, North Carolina: Duke University Press, 2018), 24–42, https://doi.org/10.1215/9781478004301-002.

6   "UN Shared Rohingya Data without Informed Consent," *Human Rights Watch* (blog), June 15, 2021, https://www.hrw.org/news/2021/06/15/un-shared-rohingya-data-without-informed-consent.

7   "Germany: Refugees Sue the Government for Invasion of Privacy," Deutsche Welle (state-owned broadcaster's website), accessed May 2, 2022, https://www.dw.com/en/germany-refugees-sue-the-government-for-invasion-of-privacy/a-53345609.

with border technologies on refugee and migrant populations.[8] Automated decision-making processes are routinely used in visa determination proceedings to exclude individuals based on arbitrary and opaque perceptions of risk.[9] These automated systems reflect preconceptions of risk and regularly codify racism, as well as ageism and sexism against young unaccompanied men.[10] Yet the attraction of technosolutionism persists, perhaps because framing these impulses as bureaucratic rather than political and social diminishes accountability for the politics they advance for those who build and deploy them.

Moreover, technosolutionist approaches make numerous presumptions about governments or the legal and policy context in which the technology is deployed. They presume the preexistence of a strong civil society, laws to protect citizens, and a bureaucracy that is responsive to criticism—particularly when it is leveled by those who are most abstracted from power. The experiences of Afghanistan and Uganda, discussed in this paper, and specifically the experiences of refugees in those countries, remind us that these assumptions often do not hold. Refugees exist in increasingly fluid political contexts shaped by rising nationalism, anxieties around scarcity, and border cultures of exclusion. They can be welcome in a country and completely unwelcome in the next depending on the space that exists for xenophobic discourse in mainstream political culture. They can be subject to the worst excesses of technosolutionist approaches simply because they do not have the protection of a state or access to the processes of state to defend them.

Technosolutionism also creates opportunities for new types of harm. In January 2022, the global databases of the International Committee of the Red Cross (ICRC) were hacked in order to gain access to personal data of victims of conflict whom the ICRC sought to reunite with family members.[11] The motivations for the hack remain unclear, and while this is not a case where harm was deliberately triggered by an organization creating digital identities, it is a reminder that the safety of refugees' digital identities is always contingent on the safety of the systems used to collect and store identifying information. Similar hacks have attempted to gain access to refugee information during Russia's ongoing invasion of Ukraine.[12] Indeed, experts like Zahra Rahman at the Engine Room, a nonprofit entity that provides support for nongovernmental organizations that collect data as a part of their broader operations, warns that there has been an unnecessary expansion in the quantity of data collected by humanitarian organizations, often with no clear intention, with no ability for vulnerable people to opt out, or with insufficient investments in keeping the data safe indefinitely.[13]

This paper aims at giving a global context to the challenge of technosolutionism in refugee and migrant population management by beginning with challenges that arise in the West before exploring how they manifest in two countries of the global South. Technosolutionism travels, and this report aims to highlight the impact of this momentum. Examining the cases of Afghanistan and Uganda allows us to reframe these questions as a global concern. Given the relationships between research, funding, and cooperation between states—where policymakers, implementers, and research institutions in the global South are financially dependent on governments from the global North—developing countries are not at the margins of technosolutionist approaches to managing human mobility. Indeed, they are at the forefront. In the absence of strong local government, poor countries and refugee populations become test beds for implementing ID technologies with only marginal civic pushback. Refugee populations within these communities are doubly vulnerable because they exist completely outside the possibility of civic protection of any state. This perhaps explains why refugee protection agencies have been at the forefront of developing and expanding the use of biometric identity systems around the world.

---

8   Petra Molnar, *Technological Testing Grounds: Migration Management Experiments and Reflections from the Ground Up*, eds. Sarah Chander et al., EDRi and the Refugee Law Lab, Report, November 2020, https://edri.org/wp-content/uploads/2020/11/Technological-Testing-Grounds.pdf.

9   Molnar, *Technological Testing Grounds.*

10   Molnar, *Technological Testing Grounds*; see also Cathy O'Neill, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (New York City: Crown Publishing, 2016).

11   "Cyber-Attack on ICRC: What We Know," International Committee of the Red Cross (website), February 16, 2022, https://www.icrc.org/en/document/cyber-attack-icrc-what-we-know.

12   Marie McAuliffe and Anna Triandafyllidou, *World Migration Report 2022* (Geneva: UN International Organization for Immigration, 2022), 21–58, https://publications.iom.int/books/world-migration-report-2022.

13   Vittoria Elliott, "Humanitarian Organizations Keep Getting Hacked Because They Can't Spend to Secure Data," Rest of World, February 3, 2022, https://restofworld.org/2022/humanitarian-organizations-hack/.

A Migrant Crisis?

Refugees and migrants are at risk of specific digital rights violations triggered by technosolutionism because of the relatively reduced political power they hold within the societies they enter. According to the International Organization for Migration (IOM), between 1970 and 2020, the total global number of migrants grew from 2.3 percent of the world's population to the current 3.6 percent.[14] Policymakers and analysts have interpreted this data to mean that there is a migrant crisis underway, resulting in increasingly elaborate policing and control.

Rather than a crisis in immigration, though, what we are facing is a crisis in policymaking in which an alarmist interpretation of migration data is being used as a pretext for unnecessarily harsh clampdowns on refugees and migrants in certain regions of the world. Moreover, the deployment of increasingly expensive and questionable technology in border management is having a counterproductive effect on the public sphere. Governments are increasingly accepting, normalizing, and even embracing nationalist claims around the invasion of migrants and population replacement that are, by extension, creating space for even more extremist rhetoric to undermine democracy generally. Technology built and used in this space therefore has ramifications for society at large.

This reaction is rooted in a fallacy about what these refugee numbers mean. While more people are on the move than have ever been in history, there are also more people in the world than ever before in human history and, in theory, more capacity to provide for those people. While every displaced person represents a form of crisis, as a percentage of the global population, the number of migrants has remained steady. Significantly, the global share of migrants moving outside their region of origin remains especially low. To be sure, any level of growth increases demands on local administrations and service providers of different types, not least on the natural environment in the absence of concerted efforts to defend it. However, it is important to read these figures alongside related measures like economic growth or population decline. The 2020 Africa Migration Report captures some of the tensions that arise from uncritically accepting the proposition that any crisis in border management arises from an absolute increase in the number of migrants.[15] What has changed is not the *relative number* of people who are on the move, but the *willingness* to prevent the events or factors that cause population movements and to provide for those who move.

In addition, IOM's definition of "migrants" comprises all those who have changed their country of residence. This demands nuance both in terms of quantifying the scale of the challenge and developing a meaningful political response. The vast majority of people who are displaced do not leave their country or region of origin. Some people change their country of residence in response to pull factors (factors drawing them toward a region), others due to push factors (factors pushing them away from a region), and some through a combination of both. An approach that does not distinguish between these groups can complicate policy responses. Thus, IOM notes twenty-five million migrants in Africa, but the majority of those who change their country of origin in Africa are refugees who remain in the region or in their home country, requiring a different policy response

---

14 McAuliffe and Triandafyllidou, *World Migration Report 2022.*

15 Aderanti Adepoju with Corrado Fumagalli and Nanjala Nyabola, eds., *Africa Migration Report: Challenging the Narrative* (Addis Ababa: International Organization for Migration, 2020), https://publications.iom.int/system/files/pdf/africa-migration-report.pdf.

from, for example, those who are migrating in search of educational or seasonal labor opportunities.[16] And while a growing number of people are seeking safety from natural and man-made disasters, it is not a localized challenge. Displacement caused by climate change includes displacement caused by forest fires, drought, and widespread flooding in the global North as well.

According to IOM, Europe is currently the largest destination for global migrants, with eighty-seven million people, or 30.9 percent of the international migrant population.[17] But many of these are students, seasonal laborers, temporary workers, and others who are not seeking to permanently change their country of origin; for example, in 2018, there were 1.3 million students across the region.[18] These are groups that contribute significantly to the economies of the countries they enter.

The blurred definitional lines affect policy responses, such as the decision by the UK's Home Office to implement offshore refugee processing in Rwanda, which it justified by arguing that doing so would "end people smuggling" to the UK.[19] Some refugees may indeed be victims of people smuggling, but not all are, and a blanket policy to treat all refugees as such stigmatizes vulnerable populations. This can lead to disastrous outcomes like the Windrush scandal. In the 1960s, black residents of UK colonies in the Caribbean were invited to the island to work in factories, schools, and hospitals. As this was before independence, they were all technically British citizens. The scandal arose when these British citizens, some of whom did not have additional citizenship documents, were wrongly deported under migration policies designed to capture illegal migration.[20]

With the exception of Germany, which has 1.2 million refugees and has pursued a more welcoming policy approach than other European Union (EU) countries, none of the world's largest refugee populations are

in Europe (with the exception of transcontinental Turkey) or North America. In 2022, Turkey has been hosting the largest refugee population, at 3.7 million people, followed by Colombia, Uganda, and Pakistan, at fewer than half that number each.[21] Moreover, proportionately few refugees use clandestine routes to access wealthy countries, yet this anxiety drives much of Europe's migration management policy. Clandestine routes are used because accessible routes to asylum are disappearing. Indeed, the United Nations High Commissioner for Refugees' (UNHCR) policy in the past has been to reject "secondary movements," discouraging refugees from seeking opportunities in third countries by arguing that it limits the ability of countries to manage their migration policies.[22]

It is important to note that international law makes distinctions between different populations on the move, aiming to inform more holistic responses to migration. Refugee law, for example defines refugees as a narrow group moving in response to one of five claims of persecution: race, religion, nationality, membership of a particular social group, or political opinion. However, today many people who have changed their country of residence in flight do so in response to broader existential threats like conflict or climate change.[23]

The protection of trafficked persons is also governed by a distinct set of conventions. For example, the Council of Europe defines victims of trafficking as:

> Recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the

16   McAuliffe and Triandafyllidou, *World Migration Report 2022*.

17   McAuliffe and Triandafyllidou, *World Migration Report 2022*.

18   "Learning Mobility Statistics," European Commission (website), October 2020, accessed May 3, 2022, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Learning_mobility_statistics.

19   "One-Way Ticket to Rwanda for Some UK Asylum Seekers," BBC News, April 14, 2022, https://www.bbc.com/news/uk-politics-61097114.

20   "Windrush Scandal Explained," Joint Council for the Welfare of Immigrants, accessed June 29, 2022, https://www.jcwi.org.uk/windrush-scandal-explained.

21   "Refugee Data Finder," UN High Commissioner for Refugees (statistics), accessed May 3, 2022, https://www.unhcr.org/refugee-statistics/.

22   Giulia Scalettaris, "Refugees and Mobility," Oxford Department of International Development's *Forced Migration Review* (September 2009), 58–59, https://www.proquest.com/docview/236493362?fromopenview=true&pq-origsite=gscholar.

23   "Refugee Data Finder," UNHCR.

exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs.

Yet even this highly specific definition has triggered ambiguous policy in countries like Italy, where concerns about human trafficking are being used to justify increasingly violent responses to asylum seekers and refugees. Italy records one of the highest percentages of trafficked victims in Europe, with at least 1,660 victims in 2021.[24] Even so, the most vulnerable to trafficking are unaccompanied minors, who would theoretically be eligible for asylum anyway, but are disqualified by increasingly complex rules. Notably, Italy rejected roughly three in four asylum requests in 2021.[25] In addition, experts argue that by ending rescue operations on the high seas and foreclosing safe routes to seek asylum, countries like Italy actually drive people toward clandestine routes, triggering human trafficking.[26] The increasing criminalization of asylum in the United States also is being justified as necessary to combat human trafficking.[27] Yet expert analysis affirms that these policies often drive people further into the hands of human traffickers, who thrive in capturing their targets along more dangerous routes.[28]

Overall, much of the technosolutionism that guides migration management is informed by fallacies about how many people are on the move, why they move, and how. Countries increasingly manage all classes of migrants and refugees with the same tools premised on the criminalization of human mobility, treating all migrants as potential criminals until proven otherwise: for example, in the United States, the Trump administration banned all immigration from six predominantly Muslim countries.[29]

Alarm over the rising numbers of global migrants reflects a shifting politics of inclusion and belonging, with migrants and refugees at the center of growing right-wing or ethnonationalist antagonism. For instance, the rise of right-wing nationalism in Europe has led even nominally socially democratic parties like Italy's center-left Democratic Party to embrace anti-immigration platforms to secure parliamentary majorities.[30] Similarly, while the Democratic Party in the United States promised to rescind many of the extremist policies of the Trump administration, several of the harsh border management structures put in place by Trump remain in place, including the Title 42 removals that allowed US Customs and Border Protection to extradite anyone "arriving from a country where a communicable disease was present."[31] This regulation was routinely used to return asylum seekers and refugees transiting from countries in Central America and the Caribbean, including Haiti, until a federal judge struck it down in November 2022.[32]

Criminalization of migration is in fact a symptom of heightened nationalism and growing xenophobia, and the most vulnerable migrants in greatest need for protection are often the easiest targets because they are the most visible. Adding technology only deepens the policy confusion. Support for deploying

24 Jennifer Philipp, "The Fight Against Human Trafficking in Italy," The Borgen Project (blog), July 31, 2021, https://borgenproject.org/human-trafficking-in-italy/.

25 ANSA, "Asylum Requests in Italy: 39% Drop in 2020," InfoMigrants (a collaboration of France Médias Monde, Germany's Deutsche Welle, and Italian press agency ANSA), April 16, 2021, https://www.infomigrants.net/en/post/31567/asylum-requests-in-italy-39-drop-in-2020.

26 "Leading Human Rights Groups Call for Renewed Commitment to Solidarity and Action to Protect Children in Migration at EU Borders," Safe Passage (nonprofit organization), December 8, 2021, accessed May 3, 2022, https://www.safepassage.org.uk/news/2021/12/8/leading-human-rights-groups-call-for-renewed-commitment-to-solidarity-and-action-to-protect-children-in-migration-at-eu-borders; see also "Smuggling of Migrants: The Harsh Search for a Better Life," UN Office on Drugs and Crime, accessed June 29, 2022, https://www.unodc.org/toc/en/crimes/migrant-smuggling.html.

27 "How Reform of US Immigration Policies Would Significantly Improve Its Human Trafficking Situation," Freedom Collaborative, accessed June 29, 2022, https://freedomcollaborative.org/newsletter-archive/how-reform-of-us-immigration-policies-would-significantly-improve-its-human-trafficking-situation.

28 Carter Quinley, "Along the Borderline: The Critical Links Between Human Trafficking and U.S.-Mexico Immigration," The International Affairs Review, a graduate student-run journal of The George Washington University Elliott School of International Affairs, Spring 2021, https://static1.squarespace.com/static/5f2ed301da84567c22edd5bf/t/6140bf82b6fc4b24b9026ea9/1631633282301/Spring-2021_Quinley.pdf.

29 Harsha Panduranga, Faiza Patel, and Michael W. Price, Extreme Vetting and the Muslim Ban, Brennan Center for Justice, 2017, https://www.brennancenter.org/our-work/research-reports/extreme-vetting-and-the-muslim-ban.

30 "Europe and Right-Wing Nationalism: A Country-by-Country Guide," BBC News, November 13, 2019, https://www.bbc.com/news/world-europe-36130006.

31 "42 US Code § 265: Suspension of Entries and Imports from Designated Places to Prevent Spread of Communicable Diseases," Legal Information Institute, Cornell Law School (website), accessed May 3, 2022, https://www.law.cornell.edu/uscode/text/42/265.

32 Maria Sacchetti and Spenser S. Hsu, "Federal Judge Strikes Down Trump-Era Border Policy Known as Title 42", Washington Post, November 15, 2022, https://www.washingtonpost.com/national-security/2022/11/15/border-ruling-title-42/.

technology to manage migration is rooted in the idea that irregular migration is a threat to the political and social stability of the receiving countries. This unsubtle approach essentially criminalizes all forms of migration that do not meet the threshold of a model migrant: one who is completely financially independent in comparison to one who has lost everything; or one who arrives ready to contribute to their incoming society immediately, as opposed to one who has suffered debilitating trauma.[33]

When confronted by the reality that model migrants do not exist, the discriminatory bases for these policies become evident. For example, the Polish border is one of the terrestrial borders of the EU. According to an early February 2022 article in *The Guardian*, "at least nineteen" refugees died at Poland's border amid the rhetorical weaponization of the refugees in a geopolitical dispute between EU member states and Belarus.[34] As late as January 2022 the Polish government was erecting a border to prevent the arrival of Afghan, Syrian, and other refugees,[35] yet at the end of February 2022, following the start of the Russia's war on Ukraine, it welcomed white Ukrainian refugees with open arms.[36] The Polish government justified its lack of admittance for nonwhite refugees at the Polish border citing a lack of acceptable documentation, though white Ukrainian refugees were admitted despite a lack of the same documentation: a racist double standard.

The intensified use of technologies of surveillance and control at the border must be understood in the context of governments that are increasingly willing to implement national policies on refugees and migrants that would be unacceptable when used on other groups. In Europe, nominally liberal Danish administrations have passed laws requiring refugees to work,[37] confiscating assets from arriving refugees,[38] and revoking refugees' residency permits, leaving them the choice of remaining in a deportation center or returning to countries that are still in conflict.[39] Yet Denmark only received 489 new refugees in 2021,[40] and hosts 36,023 refugees, down from a peak of 73,690[41] in 2016,[42] which pales in comparison to the 854,590[43] refugees in Lebanon who are officially registered with UNCHR, who likely make up a fraction of the actual number of refugees in that country.[44] The decline in refugee and migrant arrivals and applications in Denmark is more likely a result of countries like Turkey and Lebanon absorbing the bulk of refugees fleeing conflicts in the Middle East, rather than any deterrent effect.[45] Meanwhile, Denmark has deported those Syrian refugees to active conflict zones when they choose not to remain in a deportation center and forcibly separated families that have fled some of the most intense conflicts of the twenty-first century.[46]

In many cases, the technology used to manage migration is carceral technology (i.e., technology

33 Serin D. Houston and Olivia Lawrence-Weilmann, "The Model Migrant and Multiculturalism: Analyzing Neoliberal Logics in US Sanctuary Legislation," in *Migration Policy and Practice*, ed. Harald Bauder and Christian Matheis (New York: Palgrave Macmillan, 2016), 101–26, https://doi.org/10.1057/9781137503817_6.

34 Lorenzo Tondo, "In Limbo: The Refugees Left on the Belarusian-Polish Border–a Photo Essay," *Guardian*, February 8, 2022, https://www.theguardian.com/global-development/2022/feb/08/in-limbo-refugees-left-on-belarusian-polish-border-eu-frontier-photo-essay.

35 Lorenzo Tondo, "Poland Starts Building Wall through Protected Forest at Belarus Border," *Guardian*, January 27, 2022, https://www.theguardian.com/world/2022/jan/27/poland-starts-building-wall-through-protected-forest-at-belarus-border.

36 Givi Gigitashvili, "Belarus Criticizes EU Border Tactics, with Migrants Caught in the Middle," Digital Forensic Research Lab (DFRLab), October 13, 2021, https://medium.com/dfrlab/belarus-criticizes-eu-border-tactics-with-migrants-caught-in-the-middle-873fe764f94f; and Mehdi Chebil, "'Pushed Back Because We're Black': Africans Stranded at Ukraine-Poland Border," France 24, February 28, 2022, https://www.france24.com/en/europe/20220228-pushed-back-because-we-re-black-africans-stranded-at-ukraine-poland-border.

37 "Denmark Tells Some Migrants to Work for Benefits," BBC News, September 8, 2021, https://www.bbc.com/news/world-europe-58484953.

38 "Denmark's 'Migrant Confiscation Law' Yields Little Cash," BBC News, November 4, 2016, https://www.bbc.com/news/world-europe-37871792.

39 "Denmark: Hundreds of Refugees Must Not Be Illegally Forced Back to Syrian Warzone," Amnesty International, April 26, 2021, https://www.amnesty.org/en/latest/news/2021/04/denmark-hundreds-of-refugees-must-not-be-illegally-forced-back-to-syrian-warzone/.

40 Michala Clante Bendixen, "How Many Refugees Are Coming to Denmark," Refugees.dk (part of Refugees Welcome), accessed July 12, 2022, http://refugees.dk/en/facts/numbers-and-statistics/how-many-are-coming-and-from-where/.

41 "Refugee Population by Country or Territory of Asylum-Denmark," UNHCR refugee data via World Bank website, accessed July 12, 2022, https://data.worldbank.org/indicator/SM.POP.REFG?locations=DK.

42 "Minister Praises 'Low' Number of Denmark Asylum Applications in 2021," *Local*, Denmark edition, January 27, 2022, https://www.thelocal.dk/20220127/minister-praises-low-number-of-denmark-asylum-applications-in-2021/.

43 "Lebanon," UNHCR, Global Focus (website), accessed July 12, 2022, http://reporting.unhcr.org/lebanon.

44 Yasmin Kayali, "Syrian Refugees in Lebanon Need Help and Protection, Not More Pressure to Leave," *New Humanitarian*, January 18, 2022, https://www.thenewhumanitarian.org/opinion/2022/1/18/Syrian-refugees-Lebanon-help-protection-pressure-leave.

45 "Denmark's 'Migrant Confiscation Law' Yields Little Cash."

46 Elian Peltier and Jasmina Nielsen, "These Refugees Can't Stay in Denmark, but They Can't Be Sent Home," *New York Times*, March 7, 2022, https://www.nytimes.com/2022/03/07/world/europe/denmark-syrian-refugees.html.

based on the logic of jails and prisons), designed to control the mobility and rights of migrants. Today, almost all major border systems around the world are dependent on technology to manage human mobility premised on unproven anxieties around massive immigration requiring ever more complex policing responses. FRONTEX, the European border management agency, has made embedding technology into border management a cornerstone of its approach. In 2020, the agency announced that it would utilize "intuitive user interfaces and wearables supported by artificial intelligence and with augmented reality capabilities, 3D facial and iris verification technology for 'real-on-the-move' border crossing experience, digital identity based on the blockchain technology," and more as part of its research initiatives on border management.[47] The American Civil Liberties Union (ACLU) reports that the US border agency uses, among other data collection mechanisms, an automated tracking system (ATS) that assigns travelers a "computer-generated 'risk assessment' score retained for forty years, which is secret and unreviewable."[48]

Yet the idea of a large-scale criminalized influx of refugees, particularly into wealthy countries, remains unsupported by data and by existing refugee behavior. Rather, what emerges is a deeper political crisis of statehood, where, after normalizing ethnonationalist politics, the border becomes a vector for the state to project its ideas of identity, security, and control onto a site where it is least likely to be challenged. Refugees and migrants do not have the full rights of citizenship. They are vulnerable to opaque policymaking and drawn-out decision-making, as well as inhumane policies, while experiencing the cruelest face of state.[49] For instance, the US Supreme Court argues that people—regardless of citizenship—have fewer claims to Fourth Amendment privacy rights at the border because of border restrictions, leaving it up to the politics of various US administrations to interpret the extent of these protections.[50] Deploying technology to manage migration, particularly where the technology is still contested for ethical or welfare reasons or where the technology has been prohibited for use on domestic constituencies, underscores that refugees and migrants are at risk of specific digital rights violations. As such it is important to explore what these border cultures are.

---

47 "Frontex Helping to Bring Innovation to Future Border Control," News Release, August 11, 2020, accessed May 3, 2022, https://frontex.europa.eu/media-centre/news/news-release/frontex-helping-to-bring-innovation-to-future-border-control-VetIX5.

48 "Border Security Technologies," American Civil Liberties Union (website), accessed May 3, 2022, https://www.aclu.org/other/border-security-technologies.

49 "Manus Island: Australia Abandons Refugees to a Life of Uncertainty and Peril," Amnesty International, February 1, 2018, https://www.amnesty.org/en/latest/news/2018/02/manus-island-australia-abandons-refugees-to-a-life-of-uncertainty-and-peril/.

50 "United States v. Flores-Montano," Oyez.org (a free law project), accessed November 10, 2022, https://www.oyez.org/cases/2003/02-1794.

Border Cultures as State Anxiety

It is impossible to consider border politics properly without reflecting on the historical and contemporary politics of the state, particularly given that policies related to ID management are the purview of the modern state. German philosopher Max Weber's classic formulation says that the state is the entity that has "a monopoly on the use of force" within a specific territory.[51] However, in contemporary times, his formulation is challenged by the prevalence of civil war, for instance.[52] Contemporary state theory better echoes French sociologist Pierre Bourdieu's approach, in which the state is not so much an entity but a nexus of relationships, where different types of power and capital interact within a geographic space to produce certain outcomes.[53] Power in this case is not simply military power but also economic, social, and cultural capital, and the state is essentially the means through which these various types of power try to reproduce themselves within the specific society. The state therefore emerges when different centers of power interact within specific institutional contexts to produce large-scale outcomes.

Borders are inherently contentious. They represent a fragile consensus on underlying political issues and conflicts. In premodern times, boundaries between communities were fluid and depended on the state of the relationship between members of communities, each of which saw themselves as distinct. They often roughly corresponded to geographical features like rivers or hills but could easily be changed by incursion or migration. In Europe, the Treaty of Westphalia of 1648 arguably settled many European borders and is often cited as the birthplace of the modern state, illustrating that settled borders are a positive political development given the long history of territorial conflict on the continent.[54] In Europe, even when excluding conflicts in Ukraine, borders remain contested: the status of Northern Ireland, for instance, became fraught again following the UK's exit from the EU.[55] Meanwhile, border conflicts remain hot in Africa and Asia, where contemporary borders still reflect the imperial designs of European powers over local realities. Put simply, borders are a political construction and their permanence remains questioned in much of the world.

The border is a key site for both defining the state and witnessing the nature of these power relationships; essentially, a key site is where a state defines and practices what it stands for. Ruben Zaiotti, a scholar of border politics, offers up the term "border cultures" to describe the aggregated total of these practices and argues that the concept of culture is embedded in contemporary border politics. He defines culture by extension as a collection of practices that are the "congealed" manifestation of ideas that shape the relationships that make up the state.[56] Essentially, each of the various sites of power within a state system contains ideas about what its role is and what its relationship to other sites is or could be. These ideas in turn lead to certain actions or approaches and then to practices. Political cultures are the aggregated total of these practices and interactions. By looking at border practices, Zaiotti argues, we can define the ideas that shape the various centers of power within a society as well as the political and social culture of the state. "Border cultures" therefore refers to the ideas that underpin the practices of

51   Max Weber, *Politics as a Vocation* (Philadelphia: Fortress Press, 1965).

52   Andreas Anter, "The Modern State and Its Monopoly on Violence," in *The Oxford Handbook of Max Weber*, eds. Edith Hanke, Lawrence Scaff, and Sam Whimster (Oxford, United Kingdom: Oxford University Press, 2020), 225–36, https://doi.org/10.1093/oxfordhb/9780190679545.013.13.

53   Pierre Bourdieu, "On the State: Lectures at the Collège de France, 1989-1992," ed. Patrick Champagne (Cambridge, UK: Polity Press, 2014), 10.

54   Stephen Okhonmina, "States without Borders: Westphalia Territoriality under Threat," *Journal of Social Sciences* 24, no. 3 (2010): 177–82, https://doi.org/10.1080/09718923.2010.11892853.

55   Cathy Gormley-Heenan and Arthur Aughey, "Northern Ireland and Brexit: Three Effects on 'the Border in the Mind,' " *The British Journal of Politics and International Relations* 19, no. 3 (2017): 497–511, https://doi.org/10.1177/1369148117711060.

56   Ruben Zaiotti, "Cultures of Border Control: Schengen and the Evolution of European Frontiers," University of Chicago Press, 2011.

managing human mobility, as well as the motivations behind the decision-making processes.

The border is therefore a major site for both defining and understanding a state. "Border cultures" are the ideas that underpin state practices in that society, with the power dynamics among various power holders within it collectively defining the culture of that society. Basically, a state reflects who it is at the border. Often these interests occur in a matrix and are not linear, but by looking at what border cultures a country will tolerate, we can discern which groups dominate the conversation elsewhere in the society. Practices that criminalize all of migration indicate growing tolerance for xenophobia, as well as the growing space for exclusionary politics within a society. In contrast, border cultures characterized by allegiance to human rights and international law suggest that civic institutions in the country retain significant power and broader acceptance of international law and human rights as organizing political principles.

European borders offer an example of how border cultures are formed, reified, and extrapolated. The EU is the product of multiple historical events, notably World War II and the long history of intense conflict between nations and states in the region, as well as a desire to reduce competition between nations and encourage alternative forms of engagement. The Maastricht Treaty of 1992 created the pathway for European integration and went beyond previous agreements on an economic union toward a political union that would enhance cooperation, provide for a common defense, and allow for significant participation from citizens.[57] Research shows that one unintended consequence of the Maastricht Treaty, however, was transforming the main political concerns of Europeans from economic and material to cultural.[58] With shifting responsibility for economic cooperation and international relations to the EU, individual European countries have developed political cultures that are predicated on defining and consolidating culture and identity, and excluding outsiders is often deployed as a shorthand for addressing these anxieties. Europe shares a common external border, but internal border practices are still heavily shaped by domestic concerns. The EU's border culture is therefore a product of both domestic and regional decision-making.

Contemporary border culture in the EU is increasingly rooted in practices of exclusion, and indeed racism, and this manifests in increasingly violent responses to all forms of migration. "Fortress Europe" is a term embraced by many policymakers on the European continent referring to the overall desire to make external borders impenetrable, even while internal borders in Europe are among the most porous in the world.[59] The Mediterranean Sea has been a focal point for some of these policies, where the crossing is heavily policed and individuals are routinely allowed to die for deterrence effect. Similarly, land borders in countries like Poland, Lithuania, and Hungary have emerged as another contested frontier. Deaths on European borders are not only normalized but are explained away by governments as geopolitical inconveniences rather than deeper moral policy failures, even while the number of these deaths increases.[60] In 2017, IOM called the Mediterranean Sea "the world's deadliest border" because 33,761 people died attempting to cross it between 2000 and 2017, comprising 40 percent of all border deaths in the world during that period.[61] Ninety percent of those attempting to cross the Mediterranean Sea were from Afghanistan, Bangladesh, Eritrea, Iraq, Nigeria, Pakistan, Somalia, Sudan, Syria, and the Gambia.[62]

In his "Discourse on Colonialism," Martinican scholar of decolonization Aimé Césaire rails against myths of exceptionalism that tolerate and indeed encourage racist cruelty and violence against one group of people.[63] Césaire notes that an appetite for cruelty

57   Emile Noël, "Reflections on the Maastricht Treaty," *Government and Opposition* 27, no. 2 (1992): 148–57, https://www.jstor.org/stable/44483711.

58   Constantin Schäfer, Sebastian A. Popa, Daniela Braun, and Hermann Schmitt, "The Reshaping of Political Conflict over Europe: From Pre-Maastricht to Post-'Euro Crisis,' " *West European Politics* 44, no. 3 (2021): 531–57, https://doi.org/10.1080/01402382.2019.1709754.

59   Hans-Jorg Albrecht, "Fortress Europe: Controlling Illegal Immigration," *European Journal of Crime, Criminal Law and Criminal Justice* 10, no. 1 (2012).

60   "Thousands Protest Migrant Deaths at Spain-Morocco Border," Associated Press, July 1, 2022, https://apnews.com/article/africa-migration-race-and-ethnicity-spain-5c69182b3d7bdaffc3418ecfe2ded1f9.

61   Harsha Walia et al., *Border and Rule: Global Migration, Capitalism, and the Rise of Racist Nationalism* (Chicago: Haymarket Books, 2021); and Reuters Staff, "Mediterranean by Far the World's Deadliest Border," Reuters, November 24, 2017, https://www.reuters.com/article/us-europe-migrants/mediterranean-by-far-worlds-deadliest-border-for-migrants-iom-idUSKBN1DO1ZY.

62   Walia et al., *Border and Rule*.

63   Aimé Césaire, *Discourse on Colonialism* (New York: Monthly Review Press, 2000).

against "the Other" inevitably increases the appetite for the cruelty within the society in question, and that it is only a matter of time before that cruelty is exacted domestically, devouring the society from within. Césaire's warnings foreshadow the impact that border cultures are having on domestic politics in Western countries, where domestic tolerance for cruelty practiced overseas creates room for increasingly extremist politics at home.

Indeed, the high tolerance for border deaths in Europe corresponds to the growing space for far-right politics in wealthy countries. Right-wing populism is defined by a heightened desire for cultural exclusion and homogeneity.[64] Identity politics are at the heart of these movements, and refugees and migrants are a potent target for their organizing because they are not a traditional political constituency. Refugees and migrants are not citizens: they cannot vote. Research has found that these right-wing groups are not necessarily interested in capturing the state wholesale, only in normalizing and mainstreaming the rhetoric of cultural exclusion.[65] In France for example, the Front Nationale, now called Rassemblement National (National Rally), found greater support in the mainstream once it shifted its main political rhetoric from antisemitism to anti-immigration.[66] After this pivot, the party has reached the runoff stages (i.e.,

one of the two best performing parties) in three successive national elections.

Across the border, Germany presents a case study in how resisting far-right politics on migration enhances democracy more broadly. Some critics argue that the refusal of former German Chancellor Angela Merkel and her administration to embrace the anti-immigration rhetoric of the far-right Alternative für Deutschland (AfD) party ultimately decreased her party's parliamentary presence following the 2017 federal election.[67] However, other analysts emphasize that the AfD's dismal performance in the 2021 election, where its share of the vote dropped from 10.3 percent to just over 2 percent, can be traced directly to the refusal of other mainstream parties to work with them.[68] Refusing to normalize right-wing populism on immigration directly impacts the ability of right-wing parties to find room in electoral politics and in political discourse, enhancing democracy more broadly.

Even so, people organized in civic institutions or participating in democratic processes are a key site of power within a society and can create new centers of power where alternative politics can be defined and alternative political cultures can be expressed.

---

64 Thomas Greven, "The Rise of Right-Wing Populism in Europe and the United States: A Comparative Perspective," Friedrich Ebert Foundation, 2016, 1.

65 Greven, "The Rise of Right-Wing Populism."

66 Greven, "The Rise of Right-Wing Populism."

67 "German Election: Merkel Wins Fourth Term, AfD Nationalists Rise," BBC News, September 25, 2017, https://www.bbc.com/news/world-europe-41376577.

68 Kate Connolly, "Germany Election: Far-Right AfD Loses Status as Main Opposition," Guardian, September 27, 2021, https://www.theguardian.com/world/2021/sep/27/germany-election-far-right-afd-loses-status-at-main-opposition.

Defining Who Is a "Person" at the Border: Relations between Citizens, Civic Institutions, and the State

Defining identities is one of the core bureaucratic functions of the state and an area where the power relationships between various segments of a society are discerned. Bourdieu argued that one of the functions of the state is in "production and canonization of social classifications," namely by producing identities, ordering them, and giving meaning to them through various systems of recognition and endorsement.[69] "People," he wrote, "are quantified and coded by the state: they have a state identity."[70] A person is a citizen by virtue of laws created by the state on gaining citizenship; for instance, several countries still do not allow women to pass on their citizenship to their children, reflecting underlying limits on women's rights.[71] The state also determines what metrics go into classifying a person as a citizen, a migrant, an asylum seeker, or an "alien." Some of these identities are codified in domestic laws, in international laws domesticated by national statutes (e.g., the Refugee Convention), or in specific legal instruments that address unique national concerns (e.g., Title 42 in the United States). Regardless, the process of defining the citizen is one of the most potent processes of state action.

The state also determines how identities are verified, and these decisions reflect the histories of that state. For example, collecting ethnic identity information is illegal in Rwanda because of the historical connection between identity cards and the genocide.[72] The growing use of biometrics and advanced artificial intelligence (AI) in verifying eligibility for social services indicates heightened mistrust of citizens claiming state benefits, while the decision to use physical addresses as the sole method of determining location indicates presumptions about

sedentariness. Identities and the methods we use to measure and interpret them are not neutral things.

The concept of identity is central to technosolutionist approaches to managing human mobility. At their heart, exclusionist border politics are about defining the identities of who does and does not belong. Meanwhile, identities are born at the nexus of individual and collective behavior, as well as state bureaucratic practices. Individuals identify in specific ways for their self-actualization and to declare their relationship to various institutions that run through their societies (e.g., sexuality and marriage). But identities are also born of communal practice, in that some identities are created by societies in order to make certain relationships and expectations that emerge from them tangible. Ethnicity is one such identity that exists primarily to extend familial relationships and networks of social security beyond biological families. By extension, a single individual often represents multiple axes of identity and may emphasize one over the other depending on the social context. Ethnic identities can help advance narrowly defined personal interests in neopatrimonial contexts (i.e., systems in which power brokers create networks of influence by using state resources to reward loyalists), but they can be harmful in the context of ethnic conflict; in response, an individual may choose to either emphasize or deemphasize their belonging to a specific group depending on whether it protects their broader interests or well-being.[73]

Where the state is the container for the social relationships between governments, individuals, civil society, and other institutions as defined previously, the border is the hard limit of this container.

69   Bourdieu, "On the State."

70   Bourdieu, "On the State."

71   Office of the High Commissioner of Human Rights, "Discrimination against Women in Nationality," United Nations OHCHR (website), accessed August 4, 2022, https://www.ohchr.org/en/special-procedures/wg-women-and-girls/discrimination-against-women-nationality.

72   Timothy Longman, "Identity Cards, Ethnic Self Perception, and Genocide in Rwanda," in *Documenting Individual Identity: The Development of State Practices in the Modern World*, eds. Jane Caplan and John Torpey, (Princeton, New Jersey: Princeton University Press, 2001).

73   Nanjala Nyabola, *Digital Democracy, Analogue Politics: How the Internet Era Is Transforming Politics in Kenya*, African Arguments series (London: Zed Books, Bloomsbury Publishing, 2018).

Geographer Reece Jones wrote that "the state is a boundary-making institution that legitimizes the exclusion of others."[74] From this perspective, the border is not just the major site for understanding and defining the state but also for clarifying the identity of the "citizen" or delineating who is allowed to claim benefits from the state and who is not. Defining people as what they are is the work of national myths and histories: the political function of the border is defining people as what they are not.

Moreover, the border is not just a physical space, particularly in the modern era. The border also performs bureaucratic functions like eligibility for public services, as well as diplomatic institutions like passports. The border is both a physical place and a set of ideas about who is entitled to full civic protection from the state. As researcher Harsha Walia writes, the border is not about movement per se and is "better understood as a method for state formation, social ordering, labor control and nationalism."[75] As such, migration and border experts point to heightened border politics as a manifestation of a crisis of nationalism that is resurgent in all manner of states around the world.[76]

The central identity created at the border is therefore that of "citizen," but the increasing dominance of right-wing border cultures means that "citizen" is often defined by what it is not (border cultures of exclusion) than what it is. Holding up the foreign "other" as a threat to the survival of the state is an indicator that the political culture has an increasing tolerance for exclusion. Recalling the previous discussion about the flawed premises at the heart of the perception of a migrant crisis, the ongoing heightened national anxieties around "invasion" or "replacement" by foreign nationals can be traced back to broader anxieties about the state's ability to maintain distinctions between those who are identified as citizens and those who are not. It is anxiety rooted in the perceived loss of control. It is a crisis of perception rooted in a baseline failure to put data in proper statistical and historical context. It is also a broader crisis of governance that is affecting the state more broadly and manifesting in a heightened desire by state institutions to project authority and control.

---

74   Reece Jones, "Violent Borders: Refugees and the Right to Move" (London/Brooklyn, New York: Verso Books, 2017), 164.

75   Walia et al., *Border and Rule*.

76   Walia et al., *Border and Rule*.

Digital Identity

There are bureaucratic, communal, and civic definitions of "digital identities," all of which speak to who we are or who we say we are online. Debates about identity find expression online as well. States do not always have the power to determine what data are used to define our digital identities because, as political entities, they do not always have the same reach or scope of action online as they do offline, at least not without intense, coordinated, and expansive action as in China. Often digital identities are much looser configurations defined by the members who participate in various groups and are usually circumscribed to the functions of those groups. Avatars, digital identities that allow individuals to have a virtual presence, are typical of digital communities.[77] Similarly, the majority of people who have a digital presence present a curated version of their lives, and their digital identities do not always correspond fully to their offline lives.[78] Digital identities can also be created without the individuals' consent, for example in shadow profiles on social media or through surveillance technology.[79]

As more government functions shift online, states are extending their bureaucratic capacity to define belonging and citizenship online. One major part of this is the capture of an individual's data through official government platforms, including border systems and identity systems, as well as clandestinely through the expansion of the surveillance state. Digital identities in the narrow sense are built on the back of data collection and aggregation systems. In technical terms, digital ID refers to a set of information that is used to uniquely identify an individual online.[80] For governments, digital ID refers to the collection of information used to uniquely identify citizens across virtual government platforms. In some countries, a digital ID is a new identity specifically created to respond to the emergence of digital government. These are usually signifier numbers that in themselves do not denote anything except sequence. In several countries, however, digital IDs are created through the process of digitalizing analog identity documents. In Kenya, for example, the Huduma Number digital ID is based on the country's national ID card, which was first created by the colonial government as far back as 1915.[81] This approach to digital identities creates several challenges as outlined in the cases below.

In recent years, more entities have built digital identity systems, promising to deliver more efficient government. Developing countries especially have been investing in creating and deploying digital identities, in part owing to partnerships with international organizations and multilateral institutions like the World Bank, as well as foreign governments. The World Bank's ID4D initiative is one such flagship initiative that has had significant ramifications for the world. Through this initiative, the World Bank has committed $1.5 billion dollars to the development and implementation of digital ID and civil registration ecosystems in at least thirty-five countries, while supporting seven more indirectly.[82] This initiative involves providing both research and analysis, as well as the design and implementation of digital ID systems.[83] By March 2022, the initiative had

77   Kil-Soo Suh, Hongki Kim, and Eung Kyo Suh, "What If Your Avatar Looks Like You? Dual-Congruity Perspectives for Avatar Use," *MIS Quarterly* 35, no. 3 (2011): 711–29, https://doi.org/10.2307/23042805.

78   Nyabola, *Digital Democracy, Analogue Politics*.

79   Sydney Butler, "What Are Facebook Shadow Profiles, and Should You Be Worried?," *How-To Geek* (online technology magazine), accessed May 19, 2022, https://www.howtogeek.com/768652/what-are-facebook-shadow-profiles-and-should-you-be-worried/.

80   "The Need for Good Digital ID Is Universal," ID2020, n.d., https://id2020.org/digital-identity; ID2020 is a US-registered nonprofit organization that serves as the secretariat of a public-private alliance focused on digital IDs.

81   Nanjala Nyabola, "Kipande, Kitambulisho, Huduma Namba: A Critical History of Digital Identity in Kenya," forthcoming.

82   "ID4D: Identification for Development: About Us" (webpage), World Bank, accessed June 30, 2022, https://id4d.worldbank.org/about-us.

83   "ID4D: Identification for Development, About Us."

provided implementation support to ten different countries, with fourteen more in the pipeline.[84] Other countries, including Kenya and India, are developing their own digital ID systems independent of such initiatives, although they are seemingly grounded in the "best practices" and rationale provided by institutions like the World Bank.[85]

Corporations are also usurping the political function of creating digital identities. So-called "real name" policies—policies that demand that people use their real identities on a given online platform—are one example of corporate policies expanding the data demands of digital participation.[86] Critics of these policies assert that online anonymity is integral to people's willingness to participate in online conversations, particularly in societies that have a history of authoritarianism.[87] Yet the corporations that run platforms argue that real name policies are a critical way of addressing some online harms, including harassment and abuse.[88] Critics also argue that, by mirroring too closely some of the limitations of the state-issued ID, including failing to recognize transgender and third gender people, real name policies threaten to reify the contours of exclusion that exist in the analog world. Decisions to accept certain types of digital IDs are not just bureaucratic decisions: they reflect the extent to which the groups represented by these and other constituencies have

power within the matrix of power and interests that the digital community represents.

With these considerations in mind, the experiences of refugees and migrants with regards to digital identity are instructive of the border cultures that are emerging in the developing world, and the extent to which they reflect the politics of the wealthy world. With the current methods through which knowledge about migration and border management is created and distributed, wealthy countries have an outsize role in defining global border cultures: a secondary layer of injustice that excludes the lived experiences of the majority of the world. The epistemologies of digital identities are almost universally articulated in wealthy countries and then deployed uncritically in poorer countries, resulting in disconnects that can have material consequences for people. The use of technology in migration management illuminates the underlying intent and practices of deploying digital identities and the implications this has for our ideas of who our state views as a person. The choice of what data are collected, how data are defined, and what they are used for is not agnostic either. It is indicative of how a state wishes to define who is a citizen and who is not, and what data it believes have the potential to reveal "truth" about those identities.

84 "ID4D: Identification for Development, Country Action" (webpage), World Bank, accessed June 30, 2022, https://id4d.worldbank.org/country-action.

85 Katelyn Cioffi et al., *Chased Away and Left to Die: How a National Security Approach to Uganda's National Digital ID Has Led to Wholesale Exclusion of Women and Older Persons*, Center for Human Rights and Global Justice at New York University School of Law, the Initiative for Social and Economic Rights (ISER), and Unwanted Witness, June 8, 2021, https://chrgj.org/wp-content/uploads/2021/07/CHRGJ-Report-Chased-Away-and-Left-to-Die.pdf. Disclosure: the author is a member of the advisory board of the Center for Human Rights and Global Justice.

86 Alfred Moore et al., "Deliberation and Identity Rules: The Effect of Anonymity, Pseudonyms and Real-Name Requirements on the Cognitive Complexity of Online News Comments," *Political Studies* 69, no. 1 (2021): 45–65, https://doi.org/10.1177/0032321719891385.

87 Moore et al., "Deliberation and Identity Rules."

88 Alex Hern, "Facebook Relaxes 'Real Name' Policy in Face of Protest," *Guardian*, November 2, 2015, https://www.theguardian.com/technology/2015/nov/02/facebook-real-name-policy-protest.

Case Studies: Afghanistan and Uganda

The prior discussion allows us to think clearly about the potential impact of the growing use of digital technologies in migration management, situating it in the context of shifting rhetoric around culture and xenophobia. To fully appreciate the international ramifications of the debate, it is important to examine the downstream impacts of such practices. Border and digital cultures rarely remain contained in specific countries. Once they become normalized in wealthy countries, they are rapidly taken up by poor countries in part through cooperation agreements and technological exchanges. They may even be deployed earlier because of less stringent regulatory regimes. Right-wing populists in Western nations also export their anxieties to other regions of the world as a way of further legitimizing them.[89]

Indeed, researchers have argued that the link between security technology and migration is not accidental: border cultures justify the increasing use of technology to manage human mobility, and there is a mutually reinforcing cycle between anxiety over migration and the justification for using more resources to build technology to manage human mobility.[90] Refugees and migrants are routinely exposed to intensified scrutiny and experimentation with new methods of surveillance and control that are banned or limited for general populations. The cases of Afghanistan and Uganda highlight the practical implications of these concerns.

AFGHANISTAN

It is nearly impossible to capture the full contours of the many crises that have beleaguered Afghanistan since 1978 in a policy document that does not explicitly discuss them. In summary, however, cycles of authoritarianism, invasion, and withdrawal have created one of the most war-affected populations in the world, and the residual generational trauma is compounded by the patterns of gendered and class-based marginalization and exclusion.[91] As a result, Afghanistan has experienced one of the largest refugee and internally displaced person (IDP) movements in the world. As of 2021, there were 2.6 million registered Afghan refugees in the world, the vast majority divided between Iran and Pakistan (2.2 million).[92] Another 3.5 million were displaced within the country.[93] Yet paths to legal asylum for refugees, even in countries like the United States that have been central to the conflicts that caused the displacement, remain few and far between.

In August 2021, when US and allied forces withdrew from Afghanistan, the Taliban took over and reimposed its strict interpretation of Sharia law on the population, including the exclusion of girls from school and women from public life.[94] This fueled a wave of chaos as thousands of people, particularly those who had worked in various capacities as support staff for the allied forces, sought to leave the country out of a fear of retribution.[95] These fears were not unfounded. In the weeks after the Taliban returned to Kabul and took over several key towns in the country, Human Rights Watch documented

---

89   Walia et al., *Border and Rule*.

90   Martin Lemberg-Pedersen, "Security, Industry and Migration in European Border Control," in *The Routledge Handbook of the Politics of Migration in Europe*, eds. Agnieszka Weinar, Saskia Bonjour, and Lyubov Zhyznomirska (Oxfordshire, UK: Routledge, 2020), 239–50.

91   "Afghanistan: Little Help for Conflict-Linked Trauma," Human Rights Watch (blog), October 7, 2019, https://www.hrw.org/news/2019/10/07/afghanistan-little-help-conflict-linked-trauma.

92   "Afghanistan," UNHCR | USA (website), accessed June 30, 2022, https://www.unhcr.org/afghanistan.html.

93   "Afghanistan," UNHCR | USA.

94   "Afghanistan: Taliban Takeover Worsens Rights Crisis," Human Rights Watch (blog), January 13, 2022, https://www.hrw.org/news/2022/01/13/afghanistan-taliban-takeover-worsens-rights-crisis.

95   "Afghanistan Crisis: Chaos at Kabul Airport amid Scramble to Evacuate," BBC News, August 18, 2021, https://www.bbc.com/news/world-europe-58256696.

at least one hundred summary executions in four provinces in the country.[96]

Owing to these anxieties, allied governments promised to evacuate staff members who were caught in Afghanistan, but critics argue that many of these promises have not been fulfilled. Former British diplomats argued that the failure of the UK's then-foreign secretary to immediately appreciate the scale of the crisis at the airport left "people to die at the hands of the Taliban."[97] Similarly, critics have argued that the US Priority 2 (or P-2) refugee program has failed to properly provide for the journalists and nonprofit organization employees who do not qualify for special immigrant visas because they are unable to leave the country and enter a third country as required by the program.[98] European countries did suspend deportations to Afghanistan following the withdrawal of allied troops,[99] but the violence in Afghanistan has continued to escalate, making it unclear how much longer the temporary measures will be sustained, considering that deportations to countries like Syria continue.[100]

Prior to the return of the Taliban, Afghanistan was one of the countries in the developing world where digital ID initiatives were advanced with the stated aim of enabling the government to provide better services. Due to generations of conflict, Afghanistan does not implement regular censuses, keep employment records, or issue basic identity cards, and many Afghan people lack the basic documentation that would give them a legal identity before the state.[101] The impetus to build elaborate digital ID systems in Afghanistan is therefore regularly framed as addressing the data vacuums created by the absence of a strong central state for several years.

However, it is important to note that much of the technology subsequently built around a digital ID approach in Afghanistan has gone beyond simple data collection to the development of panopticon-like surveillance systems. The e-Tazkira is a part of this system. The e-Tazkira is Afghanistan's main biometric digital identity card and was officially launched in 2018 in partnership with the World Bank as part of a broader social inclusion project in the country.[102] It was based on the tazkira, Afghanistan's analog identity card, which had not been issued on a routine basis in decades.[103] A presidential decree in 2013 began the process of launching the biometric identity card, but the full launch of the card was delayed by internal disagreement about what information would be collected and what it would represent.[104]

As with its predecessor, the tazkira, the e-Tazkira collects a person's name, father's and grandfather's names, national identity number, physical description, place of origin, place and date of birth, sex, marital status, religion, tribal links, ethnicity, first language, profession, level of education, and level of literacy—but it also collects fingerprints, iris scans, and several more security features.[105]

Supporters argue that the system has been a qualified success in terms of the digital inclusion of women in a country where their rights are routinely

96   Henry Ridgwell, "Taliban Committing 'Revenge Killings' against Former Afghan Security Forces, Says HRW," Voice of America (VOA), accessed May 2, 2022, https://www.voanews.com/a/taliban-committing-revenge-killings-against-former-afghan-security-forces/6333137.html.

97   Thibault Spirlet, "Whistleblower Says UK Government Failings Led to Afghan Deaths amid Kabul Evacuation," *Politico*, December 7, 2021, https://www.politico.eu/article/whistleblower-blames-uk-foreign-office-mishandling-kabul-evacuation-afghan-deaths/.

98   Masood Farivar, "Few Afghan Refugees Relocating to US Under 'P-2' Program," VOA, accessed May 2, 2022, https://www.voanews.com/a/few-afghan-refugees-relocating-to-us-under-p-2-program/6394377.html.

99   Loveday Morris and Denise Hruby, "Europe's Contentious Deportations of Afghans Grind to a Halt as Taliban Surges," *Washington Post*, August 14, 2021, https://www.washingtonpost.com/world/europe/afghanistan-asylum-europe-taliban/2021/08/13/c7118ae4-fabb-11eb-911c-524bc8b68f17_story.html.

100 Urooba Jamal, "With Dozens in Limbo, Denmark Pressured to Reverse Refugee Policy," *Al Jazeera*, November 16, 2021, https://www.aljazeera.com/news/2021/11/16/rights-groups-pressure-denmark-to-reverse-syria-refugee-policy.

101 Ali Karimi, "Surveillance in Weak States: The Problem of Population Information in Afghanistan," *International Journal of Communications 13* (2019), 4778–4794, https://ijoc.org/index.php/ijoc/article/viewFile/9803/2811.

102 "Afghanistan: Distribution of Controversial Electronic Identity Cards Launched," Library of Congress (webpage), July 19, 2018, https://www.loc.gov/item/global-legal-monitor/2018-07-19/afghanistan-distribution-of-controversial-electronic-identity-cards-launched/.

103 "Responses to Information Requests," Immigration and Refugee Board of Canada, Government of Canada, June 5, 2018, https://irb.gc.ca:443/en/country-information/rir/Pages/index.aspx?doc=455138&pls=1.

104 "New Evidence That Biometric Data Systems Imperil Afghans: Taliban Now Control Systems with Sensitive Personal Information," Afghanistan (section), ReliefWeb (website), accessed May 12, 2022, https://reliefweb.int/report/afghanistan/new-evidence-biometric-data-systems-imperil-afghans-taliban-now-control-systems.

105 "Responses to Information Requests," Government of Canada.

suppressed.[106] Prior to the launch of the new digital ID, women were not eligible to receive analog identities of their own and were left dependent on male relatives to access basic services.[107]

However, the e-Tazkira fueled the same kinds of debates about identity that have plagued efforts to decide what data an ID system should collect and what it means. For example, the ID collects information about ethnicity and nationality, leading to heated debate within the country about how these identities would be understood before the state.[108] Indeed, the European Union withdrew support for the system based on these concerns.[109] People within the country argued that the word "Afghan" for everyone's nationality was political because "Afghan" refers to a specific subnational (Pashtun) identity in the country.[110] Beyond rhetoric, critics insisted that the decision unleashed a new round of unnecessary tension around who would be counted as a full citizen of the nation.[111] Other familiar criticisms also emerged. Like many identity cards around the world, the e-Tazkira is patrilineal, collecting data on fathers and grandfathers, and implicitly marginalizing those who are unable to trace their lineage through that side of the family.[112]

The e-Tazkira is only one of the many data intensive digital identity systems that have been deployed in Afghanistan in the last twenty years. The Afghanistan Automated Biometric Identity System was maintained by the Afghan Ministry of the Interior, with support from the US government; the US military used handheld interagency identity detection equipment

(HIIDE).[113] These systems and devices all collected unprecedented amounts of data based on the assumption that more data would increase their efficiency and interoperability. However, these arguments also assumed that eventually the systems would be handed over to a strong and independent local administration.

Instead, after the return of the Taliban in 2021, HIIDE and e-Tazkira data were seized by the Taliban, creating enormous security risks for those whose data they contained.[114] Digital rights group Access Now[115] has pointed out that Afghanistan's many "biometric trails" make it particularly easy for the Taliban to identify individuals, particularly when the data can be cross-referenced.[116] Afghanistan's experience reminds us that digital ID systems are developed within political contexts, and pursuing technical efficiency without contemplating the spectrum of those political and social contexts can create significant vulnerabilities. If you have to assume a stable and positive political context as a premise for a digital ID system or the arguments for it do not hold, then the logic of the system must be challenged. Simply put, a technically efficient system can be used by authoritarian states to advance their authoritarian intentions.

Refugee populations are an integral part of the digital ID landscape in Afghanistan. Before the national initiatives were rolled out, UNHCR piloted biometric identity systems among Afghan refugees in Peshawar, Pakistan, as early as 2002.[117] UNHCR subsequently used those systems on refugee populations in Kenya, Syria, and Uganda. Researchers have rightly pointed

---

106   Jim Nash, "Digital ID a Surprising, Qualified Success for Women in Afghanistan," BiometricUpdate.com, October 7, 2020, https://www. biometricupdate.com/202010/digital-id-a-surprising-qualified-success-for-women-in-afghanistan.

107   Nash, "Digital ID a Surprising, Qualified Success."

108   "Afghanistan: Distribution of Controversial Electronic Identity Cards."

109   "Afghanistan: What Now After Two Decades of Building Data-Intensive Systems?," News and Analysis, Privacy International (website), August 19, 2021, accessed May 2, 2022, http://privacyinternational.org/news-analysis/4615/afghanistan-what-now-after-two-decades-building-data-intensive-systems.

110   Ali Yawar Adili and Jelena Bjelica, "The E-Tazkera Rift: Yet Another Political Crisis Looming?," Afghanistan Analysts Network (policy research organization), Political Landscape (webpages), February 22, 2018, https://www.afghanistan-analysts.org/en/reports/political-landscape/the-e-tazkera-rift-yet-another-political-crisis-looming/.

111   Adili and Jelena Bjelica, "The E-Tazkera Rift."

112   "Afghanistan: Distribution of Controversial Electronic Identity Cards."

113   Frank Hersey, "Urgent Call to Erase Biometric, Digital ID Databases in Afghanistan," BiometricUpdate.com, August 27, 2021, https://www. biometricupdate.com/202108/urgent-call-to-erase-biometric-digital-id-databases-in-afghanistan.

114   Frank Hersey, "Concerns over Taliban Accessing Aid Agency Biometric Data," BiometricUpdate.com, August 23, 2021, https://www. biometricupdate.com/202108/concerns-over-taliban-accessing-aid-agency-biometric-data.

115   Disclosure: The author is a member of the board of Access Now.

116   "#WhyID: International Actors in Afghanistan Must Clean Up, Restrict Dangerous Biometric Trail," Access Now, Press Release, August 25, 2021, https://www.accessnow.org/whyid-afghanistan-biometrics/.

117   Rina Chandran, "Afghan Panic Over Digital History Spurs Data Collection Rethink," Thomson Reuters Foundation, August 20, 2021, accessed May 2, 2022, https://news.trust.org/item/20210820080622-5wjww/.

out the inherent vulnerability that host countries may request access to the resulting sensitive data in order to increase their control over those populations.[118] In 2021, for instance, UNHCR collected biometric identity information from Rohingya refugees without their informed consent and subsequently turned the information over to the government of Bangladesh, ostensibly to allow the refugees to access government services in the country.[119] Instead, the government of Bangladesh turned over some of the identifying information to the government of Myanmar—the nation the refugees had fled to avoid ethnic persecution—in order to facilitate possible repatriation.[120] Despite these and other concerns, digital IDs for refugees continue to expand, with the latest proposals invoking blockchain as a solution to the challenge of verification.[121]

Meanwhile, Afghan refugees in other parts of the world continue to experience "datafication" of their identities, i.e., turning all aspects of their life into data points, and specific digital harms because they are refugees.[122] In 2020, a group of refugees from Syria, Cameroon, and Afghanistan sued the German government for privacy violations after their phone data were accessed in a breach of data protection laws that protect German citizens from such invasions of privacy.[123] A 2017 law made asylum seekers exempt from this protection, but the lawsuit is demanding removal of that exemption.[124]

Overall, the case of Afghanistan emphasizes that whatever exclusionary impulses are created in wealthy countries, where much of these digital ID technologies are developed, they are only intensified in countries with fragile political contexts and histories of violence. Collecting identity data is not a neutral act. Whatever the data the state prioritizes and frames—e.g., collecting data on ethnic identities—reflects the position the state bureaucracy has toward that particular data point. The selection of "Afghan" as an identity marker is an example of how these politicized identities can be perceived or actively used to further marginalization.

Moreover, if the state does not allow individuals to opt out of these identifiers and frames them as unchangeable, it also signifies the extent to which they believe they are immutable characteristics of the individual. If ethnic identities are defined narrowly through patrilineal inheritance, then it indicates the state's perspective that identity is a gendered marker, to the exclusion of those who exist outside narrow heteronormative, patriarchal families. Perhaps most importantly, the case of Afghanistan reminds us that the best technology in the hands of people with the worst impulses will necessarily lead to the worst outcome for ordinary people. It is no longer sufficient to advocate for digital identity systems as apolitical and decontextualized objects. They must be rooted and framed in relation to the politics they are entering.

UGANDA

Uganda currently hosts the largest population of refugees in Africa, with 1.4 million people seeking refuge from various conflicts in the region.[125] Yet Uganda has been at war for much of its independent history and has been led by an authoritarian military ruler, Yoweri Museveni, since he first came to power in a 1983 coup. As a result, Uganda hosts a large IDP population as well as millions of foreign refugees. Critics argue that Museveni has historically retained power through extensive patronage networks in the country, including control over parliament and other branches of government. The government has in recent years been implicated in highly visible acts of violence and retaliation against critics of members of the president's family. The country also previously endured a long-running insurrectionist movement led by the Lord's Resistance Army (LRA), which fueled mass displacement in northern Uganda. While no longer as active as it once was, the conflict is technically unresolved as the leader of the LRA, Joseph Kony, remains in hiding in a neighboring country, likely the Central African Republic or the Democratic Republic of Congo, resulting in what is sometimes referred to as "mixed migration," or

118   Chandran, "Afghan Panic Over Digital History."

119   "UN Shared Rohingya Data," Human Rights Watch.

120   "UN Shared Rohingya Data," Human Rights Watch.

121   "Accenture and Microsoft Plan Digital IDs for Millions of Refugees," BBC News, June 20, 2017, https://www.bbc.com/news/technology-40341511.

122   See generally Mejias, Ulises A., and Nick Couldry. 2019. "Datafication". Internet Policy Review 8 (4). DOI: 10.14763/2019.4.1428. https://policyreview.info/concepts/datafication.

123   "Germany: Refugees Sue the Government," Deutsche Welle.

124   "Germany: Refugees Sue the Government," Deutsche Welle.

125   "Figures at a Glance," UNHCR | USA (website), accessed May 12, 2022, https://www.unhcr.org/figures-at-a-glance.html.

the presence of migrant populations motivated by diverse factors.[126]

Despite these challenges, Uganda has been considered politically stable since Museveni's ascent to power in 1983 and has attracted large volumes of aid and foreign direct investment as a result. Since the 1990s, aid comprised about 70 percent of the country's spending and 15 percent of its gross domestic product, though the volume of aid has been declining in recent years.[127] According to Development Initiatives, an organization that collects data on aid around the world, Uganda has increasingly received aid in the form of concessional loans rather than grants since 2020, a trend that has steadily and dramatically increased particularly since the onset of the COVID19 pandemic.[128]

The UK is the largest bilateral donor to Uganda, though in absolute terms, and its bilateral aid to Uganda decreased by 54 percent between 2018 and 2022. The United States represented the largest increase in bilateral aid in the same period at 4 percent,[129] providing more than $950 million in aid per year.[130] The World Bank contributed 77 percent of all aid provided by international financial institutions (IFI).[131] The bulk of aid to Uganda goes to the health sector, with aid to the humanitarian sector declining by 20 percent between 2019 and 2020, while the bulk of IFI loans went to "governance and security," an increase of 454 percent in the same period.[132]

Uganda spends significant portions of its national budget on its military. According to the Stockholm International Peace Research Institute, Uganda had the largest growth in military expenditure in Africa in 2020, rising by 46 percent and far outpacing the next country on the list, Chad, at only 31 percent.[133] Today, Uganda maintains the highest number of personnel trained by the US Department of Defense among African countries, and the US State Department and US Africa Command invested $51 million in gear and training for the US army.[134] These large investments reflect the role that Ugandan soldiers play in fighting frontline wars that are seen as too expensive or politically dangerous for the US army itself including in Somalia and Iraq.[135] All of these factors conspire to create a context of dependence and independence into which broader questions of digital identities arise.

In 2015, the Ugandan government launched a digital identity registration scheme called Ndanga Muntu, to be administered by the National Identification and Registration Authority.[136] For five years, the system moved slowly and inefficiently until President Museveni himself intervened in a national directive to accelerate the process.[137] Analysts have pointed out several issues in Uganda's digital ID system that make it exclusionary by design. For instance, up to one-third of Ugandan adults do not have the ID, and the poor, the elderly, and women are disproportionately excluded and unable to access the entitlements that are distributed based on the cards.[138] The system is also operating out of sequence and requires a birth

126   The term "mixed migration" is used in multiple ways by different stakeholders. Some use it to refer to cross-border movements comprised of people with different and sometimes multiple motivations to migrate, while others use it to refer to situations in a country where there are migrant populations driven by diverse motivations. The uniting idea is a context in which hard-and-fast policy rules based purely on analyzing motivations for mobility are difficult to implement.

127   Michael G. Findley et al., "Who Controls Foreign Aid? Elite versus Public Perceptions of Donor Influence in Aid-Dependent Uganda," *International Organization* 71, no. 4 (2017): 633–63, https://doi.org/10.1017/S0020818317000273.

128   Moses Owori, "Analysis of Aid Flows to Uganda before and during COVID-19," Development Initiatives, accessed May 12, 2022, https://devinit.org/resources/aid-uganda-covid-19/.

129   Owori, "Analysis of Aid Flows to Uganda."

130   "US Relations with Uganda," US Department of State, accessed August 4, 2022, https://www.state.gov/u-s-relations-with-uganda/.

131   Owori, "Analysis of Aid Flows to Uganda."

132   Owori, "Analysis of Aid Flows to Uganda."

133   "World Military Spending Rises to Almost $2 Trillion in 2020," Stockholm International Peace Research Institute, accessed May 12, 2022, https://www.sipri.org/media/press-release/2021/world-military-spending-rises-almost-2-trillion-2020.

134   Ian Katusiime, "US Military Training: Uganda Tops Africa," *Independent Uganda* (blog), May 9, 2022, https://www.independent.co.ug/uganda-and-us-military-training/.

135   Oona A. Hathaway and Luke Hartig, "Still at War: The United States in Somalia," *Just Security* (online forum based at New York University School of Law), March 31, 2022, https://www.justsecurity.org/80921/still-at-war-the-united-states-in-somalia/.

136   "Form Fees For Registration of Persons," Uganda's National Identification & Registration Authority, accessed May 12, 2022, https://www.nira.go.ug/fees.

137   Chioffi et al., "Chased Away and Left to Die."

138   Nita Bhalla, "Uganda Sued over Digital ID System That Excludes Millions," Reuters, May 16, 2022, https://www.reuters.com/article/uganda-tech-biometrics-idUKL3N2X32RG.

certificate to register, but a majority of Ugandans do not have birth certificates and there has been no national effort to encourage birth registration.[139]

A report by Ugandan organization Initiative for Social and Economic Rights (ISER) and the Center for Human Rights and Global Justice, among other partners, argues that the digital ID system was built to be an extension of the country's national security apparatus.[140] The government initially referred to the initiative as the National Security and Information System, reflecting the military regime's growing preoccupation with spending on militarism and security.[141] The project was initially overseen by a general who argued that it was unambiguously "another element to be added to our security of weapons."[142] The system also hinges explicitly on excluding specific groups including "non-Ugandans, security risks, and criminals."[143]

Moreover, although errors are common in the digital ID system, corrections to and replacement of cards issued in the system cost just under US$14, despite the fact that low-skilled Ugandan workers earn only $110 per month on average, and access to several key government services is tied to having the card.[144] The ISER report also argues that this automatically excludes many of the citizens of one of the world's poorest countries and, by extension, excludes nearly a third of the country's adult population from accessing key services like healthcare.[145] This is a risk that recurs in many developing countries where digital IDs are not widely available and, because of intensive gatekeeping, are administered as a social benefit as well as a prerequisite for other social services, compounding the harm that occurs when they are withheld.

Given its large refugee population, Uganda is now a testing ground for the deployment of digital identities for refugees. In 2015, UNHCR launched the biometric identity management system (BIMS), which collects refugee photos, iris scans, and fingerprints.[146] These and additional data are stored in UNHCR's BIMS and the Population Registration and Identity Management Eco-System (PRIMES); UNHCR data are in turn used in Uganda, including at Bidi Bidi refugee camp, which hosts 21 percent of the country's refugee population.[147]

Although Uganda has a reputation for generosity toward refugees, the current efforts to expand their registration is rooted in historical criticism that the government overcounted refugees in various camps in order to draw more financial benefits from international organizations like UNHCR.[148] Once again, anxieties around scarcity fuel the bureaucratization and expansion of identity systems. The main argument in favor of the system is that it will simplify access to services delivered at different points, such as education or health, without requiring multiple registrations.[149] Equally, the agency has committed to building out the platform to allow refugees to access external services like registering for SIM cards, bank accounts, and more, which is currently impossible in countries that do not issue identity documents to refugees.[150]

However, as stated previously, the UNHCR system has come under scrutiny among refugee populations for being made available to hostile governments and for imposing identities that do not align with how the refugees identify themselves. In 2018, Rohingya refugees in Bangladesh rejected UNHCR's label of "forcibly displaced Myanmar nationals" instead

---

139   Chioffi et al., "Chased Away and Left to Die."

140   Chioffi et al., "Chased Away and Left to Die." Disclosure: the author has worked as an adviser on the litigation against the digital ID in Uganda and, as mentioned above, is a member of the advisory board of the Center for Human Rights and Global Justice.

141   Chioffi et al., "Chased Away and Left to Die."

142   Chioffi et al., "Chased Away and Left to Die."

143   Chioffi et al., "Chased Away and Left to Die."

144   "Wages for Low Skilled [sic] in Uganda," Take-Profit.org (financial web portal), accessed August 4, 2022, https://take-profit.org/en/statistics/wages-low-skilled/uganda/; and "Form Fees for Registration of Persons."

145   Samuel Okiror, "Uganda's ID Scheme Excludes Nearly a Third from Healthcare, Says Report," Guardian, June 9, 2021, https://www.theguardian.com/global-development/2021/jun/09/ugandas-id-scheme-excludes-nearly-a-third-from-healthcare-says-report.

146   Donya Zikry, "UNHCR and Digital Identities: Targeted Aid or Enhanced Surveillance?," Föreningen för Utvecklingsfrågor, accessed May 12, 2022, https://fuf.se/magasin/unhcr-and-digital-identities-targeted-aid-or-enhanced-surveillance/.

147   Shirin Madon and Emrys Schoemaker, "Digital Identity as a Platform for Improving Refugee Management," Information Systems Journal 31, no. 6 (2021), 929–53, https://doi.org/10.1111/isj.12353.

148   Karin Johansson and Frida Ljungek, "Global Solution, Local Inclusion?: A Study of Digital IDs for Refugees in Uganda," (thesis, Uppsala University, 2019), http://www.diva-portal.org/smash/get/diva2:1325350/FULLTEXT01.pdf.

149   Madon and Schoemaker, "Digital Identity as a Platform."

150   Madon and Schoemaker, "Digital Identity as a Platform."

of "Rohingya" amid later legitimized fears that the information would find its way back to the Myanmar government.[151] Criticisms specific to Uganda have not yet emerged, but the fears remain pressing given the fluid political situation in the region. Moreover, the widespread expansion of the system is likely to legitimize it as a standard tool in future countries.

Similarly, in view of the rapidly changing political allegiances and connections that characterize the wars that fuel refugee movements into Uganda, there is considerable risk if UNHCR makes refugee data available to the host government. As in neighboring Kenya, which is currently engaged in highly criticized returns of Somali refugees to Somalia, it is unwise to assume that because refugees have been welcomed over an extended period of time that they will remain welcome indefinitely.

There is also a concern that it is impossible to fully secure informed consent from traumatized populations.[152] Mixed migration complicates the process of creating insular refugee identity systems in countries like Uganda. The large number of IDPs in the country who are technically citizens but who may not have access to identity documents because

of their experience of conflicts contradicts the aforementioned impulse embedded in the national digital ID system to exclude noncitizens.

Uganda's experiences with digital identity point to the limits of emphasizing technical efficiency over sensitivity to local histories in building and deploying digital identity systems. Even if the Ugandan system were technically perfect, given that it is embedded in broader national security discourses, it is exclusionary by design and would only intensify an underlining politics of exclusion. And as stated, the Ugandan system is not technically perfect. Presently, Uganda remains hospitable to refugees from various countries, but as experienced over the border in Kenya, regional politics are fluid, and this acceptance cannot be presumed to be indefinite. Uganda's experience also reminds us that refugees are particularly vulnerable to disproportionate exercises of power in relation to building and deploying these systems. They are, in effect, vulnerable to experimentation by being subjected to systems that are not necessarily sensitive to their experiences as traumatized populations.

151   Zikry, "UNHCR and Digital Identities."

152   Madon and Schoemaker, "Digital Identity as a Platform."

Conclusion

Thinking critically about personhood and refugee identities in the digital age is an unusual yet necessary entry point for thinking about democratic resilience more broadly. Too often, policies applied to refugee populations are viewed as external to the domestic political discourse. This creates a policy blind spot that allows xenophobic, racist, and far-right politics to take root, undermining democracy by increasing social tolerance for such politics while mainstreaming the technology designed to advance exclusionary ideologies. Technology only intensifies and accelerates this impact. It is also systematic, as factors driving the development of technologies for one population will inevitably impact everyone. Therefore, conversations that recenter the human dimension in digital policymaking are crucial, not just to avoid the challenge of harm caused by the technology itself but to deepen the discourse to include democratic resilience more broadly.

Legal identities are crucial, and the Sustainable Development Goals in SDG 16.9 recognize that the provision of legal identities to all is a pillar of development.[153] But the pursuit of legal identities cannot come at the expense of broader human rights. The goal of providing legal identities is not to define who is—or who is not—human enough or "worthy." Moreover, systems that are predicated on illusions of scarcity and organized to minimize undefined threats are always going to be inherently unjust. The normative shift from legal identity for all to biometric digital identities for all is not a small one, and merits deeper consideration, particularly when fueled by dangerous narratives of scarcity, nationalism, and xenophobia. The desire to provide legal identities for all should not be a pretext for buttressing the surveillance state and surveillance capitalism, i.e., the unilateral harvesting of free individual data for commercial purposes.[154]

Technosolutionist responses to refugees and migrants are a product of the unfounded anxieties about the impact of migration on a handful of countries that collectively receive less than a quarter of the world's refugees. They are based on a political fallacy that underpins this growing network of data collection, surveillance, and control: statistics do not point to a dramatic increase in the proportion of people seeking to permanently move in search of safety or opportunity. The vast majority of those who are currently labeled migrants are not looking to relocate permanently. Those who seek refuge during or after conflict are most likely to remain in their region of origin, and the countries that face genuine transformation within their societies because of refugee arrivals are least likely to participate in the development and deployment of technosolutionist responses because the numbers are too large and the technology too expensive. Resources spent policing imaginary invasions by creating elaborate digital identities and surveillance systems would be better spent providing support to those who do need it, e.g. the growing populations of IDPs.

Indeed, the migrant crisis is comprised of the growing tolerance for insular politics and xenophobic rhetoric in the public sphere. The fear of invasion and replacement by migrants and refugees is a right-wing populist theory that has become increasingly accepted and even embraced by political parties in the Global North. It is creating rhetorical room for the increased criminalization of vulnerable people the world over. The pivot toward digitizing refugee identities therefore represents a misguided effort to create a technical standard for the problematic politics of exclusion. Therefore, reconsidering technosolutionism applied to refugee and migrant experiences is an important moment to reflect on the nature of the state and how state practices are

---

153 "16.9 by 2030 Provide Legal Identity for All Including Free Birth Registrations," Indicators and a Monitoring Framework: Launching a Data Revolution for the Sustainable Development Goals (website), UN Sustainable Development Solutions Network: A Global Initiative for the United Nations, accessed June 30, 2022, https://indicators.report/targets/16-9/.

154 See John Leidler, "High Tech Is Watching You," *Harvard Gazette*, March 4, 2019, https://news.harvard.edu/gazette/story/2019/03/harvard-professor-says-surveillance-capitalism-is-undermining-democracy/.

a product of political cultures. Societies that have a high tolerance for exclusionary border practices are generally societies that are developing a higher tolerance for extremism more generally. Placing technosolutionism in relation to refugees and migrants in its proper historical and political context is not solely a defense of the human rights of refugees—it is also an invitation to defend democracy and healthy physical and digital publics the world over including at home.

About the author

Nanjala Nyabola is an independent writer and researcher based in Nairobi, Kenya.

Nanjala Nyabola is a writer, researcher, and policy advocate. Her work focuses on the intersection between technology, politics, media, and society. She publishes frequently in academic and non-academic platforms as a commentator and analyst. She is the founder of the Kiswahili Digital Rights Project, and a founding member of the Africa Digital Rights Network (ADRN). She is a nonresident fellow with the Atlantic Council's Digital Forensic Research Lab, as well as The Centre for Human Rights and Global Justice (CHRGJ) and the Centre for International Cooperation (CIC), both at New York University. She has also held fellowships with the Stanford Digital Civil Society Lab, the Centre for Intellectual Property and Information Technology (CIPIT) at Strathmore University in Nairobi, Kenya, the Inclusive Global Leadership Institute at the University of Denver, and other institutions. Nyabola is the author of Digital Democracy, Analogue Politics: How the Internet Era is Transforming Politics in Kenya (Zed, 2018), Traveling While Black: Essays Inspired by a Life on the Move (Hurst, 2020), Strange and Difficult Times: Notes on a Pandemic (Hurst, 2022), as well as a co-editor of Where Women Are: Gender and the 2017 Kenyan General Election (Twaweza, 2018), The African Migration Review (2020), and Vertical Atlas (ArtEZ: 2022).

Atlantic Council