

WE, THE DATA

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HUMAN RIGHTS IN THE DIGITAL AGE

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This book is for my dear boys, who are in my heart and
on my mind, always

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What do Amazon.com, basketball legend Shaquille O’Neal, and television reality show *Shark Tank* have in common?

Ring’s video doorbell. Ring, the market leader in video doorbells, sold well over a million devices during the first year of COVID-19.¹ In the United States alone, 3.4 million American homes made use of video doorbells before the pandemic drove sales even higher.² Ring has been called the center of “the largest civilian surveillance network the US has ever seen.”³ Before its runaway success and Amazon’s purchase of the company in 2018 for over \$1 billion, it had nearly failed.⁴ Founder Jamie Siminoff turned things around with an appearance on *Shark Tank*. The sharks declined to invest, but sales increased after the show—and Shaq later signed on to pitch the product in a series of successful ads. The rest is history.

Ring’s doorbell and others like it, such as Google Nest, Blink (also owned by Amazon), and similar devices made by smaller companies, have become common for good reason: video doorbells are convenient. They make it possible to talk to people at your door when you’re indisposed or not even home, and to remotely screen who is at the door. People living in small multiunit buildings without entry systems can have their own doorbell to greet guests before coming downstairs. Before COVID-19, many of us received parcels during the day when we weren’t home to receive them, and the theft of packages became a problem—so much so that the Netflix show *Easy* produced an over-the-top episode about how neighbors resolved to take care of a local delivery snatcher.

The video doorbell, it seemed, was the answer to the new problems created by online commerce and the solution to answering the doorbell when multiple packages arrive throughout the day. But video doorbells are not the only digital devices made for our convenience or increased productivity. There are also smartphones, smart thermostats, smart TVs, smart

speakers, smart refrigerators—you name it. These smart devices form the ecosystem of the Internet of Things and have fundamentally changed many aspects of our lives and perhaps even who we are.⁵

In some ways, the smartness of these devices is misdirected. These devices are smart because they are collecting data about *you*: to shape a world around you, the collectors claim, to better suit your purpose. These devices are data intensive, reflecting a generally online world of activity that has become dependent on collecting data about us, from us, in order to function. These data are about you: your choices, your activities, your habits, your curiosities. You're the source of the data, and the interconnected devices are merely smart data collectors.⁶

By now, many of us have a variety of data-intensive devices on hand as part of our daily lives, whether we wear them on our wrists, keep them in our pockets and bags, or hang them on the wall at home. We've come to rely on personal assistants named Alexa or Google or Siri. There's a comfort to having a phone that knows where you are, in case you have an emergency or simply can't find the restaurant where you were meeting someone. Yet the cost of the convenience is the data collected from and about you. Some have encapsulated it in a popular saying that has floated around the internet for at least a decade, which goes something like this: if you're not the customer, you're the product.⁷ The idea that nothing comes for free and that, indeed, something about you is being sold to others as you browse the internet, engage on social media, and play games, is true to some extent.⁸ Data collectors are taking and analyzing data about you, whether those collectors are the companies making products, data brokers (who buy and sell data), or other companies tracking consumers. These data are sold to third parties to give you a better product and more services, and, yes, to sell you things. Companies like Meta and Google have built massive financial empires through "surveillance capitalism."⁹ Their customers are the companies trying to target every one of us at the microlevel.¹⁰ The consequences of deconstructing human life into data—the websites we visit, for how long, the friends we have on social media, our gaits, our locations, even our very faces—come not just with financial changes. They shift our very perceptions of humanity (including ourselves) and our social fabric. All of these changes have happened without our thinking too much about human rights: the rights we have as human beings to live our lives to our fullest potential.



For too long, we have heard from data collectors about what they think they are doing to help and protect us, about the importance of Big Data, and why we should advance artificial intelligence (AI). Data sources to date have been relatively silent, although data about us are being taken from our actions. *We, the Data* is about why and how to speak up for data sources by applying what we know from human rights to the way we think about datafication. As a term, *datafication* refers to the recording, analysis, and archiving of our everyday activities as digital data. It is how Big Data are created. Datafication is fundamentally different from other kinds of technological changes because it changes humanity in a personal way. Where railroads, electrification, and the shipping container all shifted our economies and relationships by massively changing what was possible, datafication does so at the individual and collective human level by recording (nearly) the entirety of our daily activities.

The possibilities of datafication may seem endless and data are everywhere, but they are not inevitable. Even outside techno-cheerleaders' circles, there is a tendency to take the human out of our machines. For example, communications scholar Laura DeNardis's book *The Internet in Everything* grimly begins, "If humans suddenly vanished from earth, the digital world would still vibrantly hum."¹¹ But the digital world exists because of our humanity, for better or worse. Without us, its utility is gone.

We need to center humans in the conversation about data by reviving human rights at their most basic level. Human rights, as I elaborate here, formally became part of the global human narrative after World War II. We might intuitively think about human rights as lists of rights and freedoms, such as the freedom of religion or the right to a nationality. At their core, however, human rights are about four values: liberty (or autonomy, to emphasize human agency), dignity, equality, and brotherhood (which I call "community" in this book). These four ideas undergird the purpose of human rights, as originally presented by René Cassin in his idea of a human rights "portico."¹² Cassin was a key member of the United Nations Committee on Human Rights that wrote the 1948 Universal Declaration of Human Rights (UDHR), the backbone of the international human rights framework.

What can human rights fix about datafication? Human rights are far from a silver bullet. We know from work on human rights that it is one

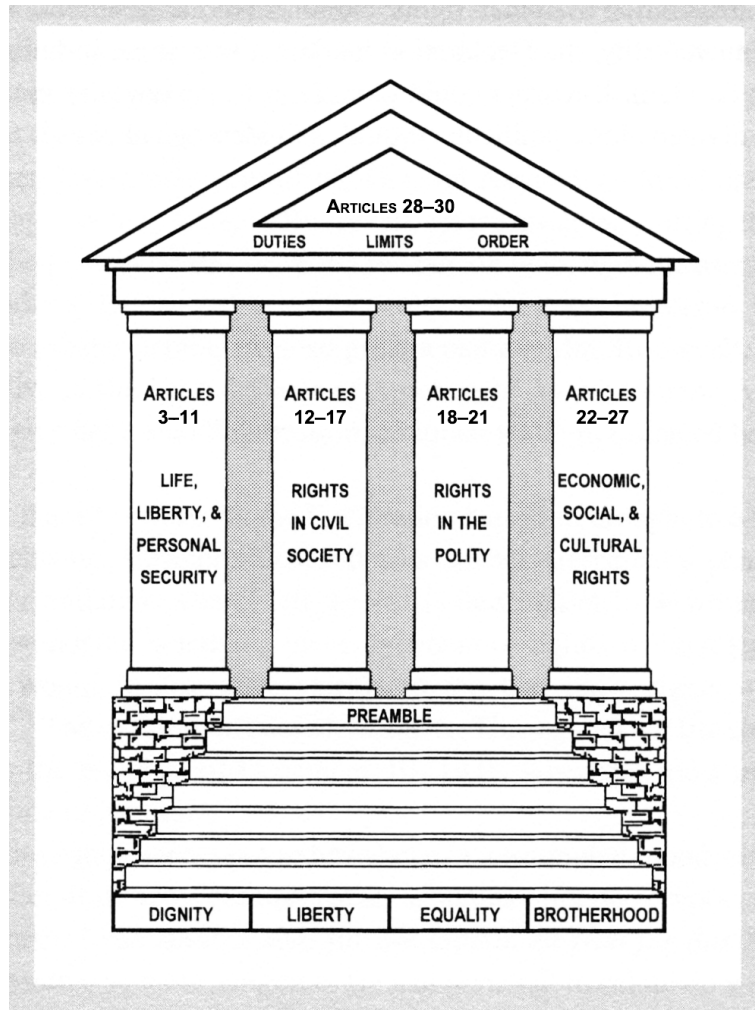


Figure 1.1

Cassin's Portico. Reproduced with permission from Katherine G. Lev. Originally from Mary Ann Glendon, *A World Made New: Eleanor Roosevelt and the Universal Declaration of Human Rights* (New York: Random House, 2001), 172.

thing to declare them and another to experience them. However imperfect, human rights do offer a coherent logic and inclusiveness that accentuates the commonalities we share with our fellow humans. This book centers human rights and, more specifically, the four foundational values of human rights as a reminder that data come from bearers of these rights, each and all of us. We can't conveniently decouple the person from the data that collectors get from us, for science, for knowledge, for convenience, or otherwise. These data and humans are tethered. As I develop below, if data are sticky to us as humans, humans ought also be sticky to data in the sense that we ought not to treat data about people, taken from people, as mere objects to

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be sorted, pooled, processed, analyzed. At the same time, we also ought not prevent sharing *any* data about people. Our social, economic, and political systems depend to a certain extent on the ability to be able to know things about people.¹³ Finding the balance between the declarations of the collectors and the sources is important, especially since we've let collectors drown out the voices of sources to demand differently.

The political and social choices we make regarding datafication will shape how AI, Big Data, and other technologies affect our lives. Our understanding of datafication will guide our choices. Without a right to data literacy, which I discuss in chapter 7, the conversation around datafication will inevitably fall to those who control and create our datafied world: Big Tech. Big Tech refers to the corporations that generate and analyze massive quantities of data using advanced algorithms that leverage machine learning techniques to make predictions.¹⁴ We generally think about a handful of companies guiding Big Tech (Amazon, Alibaba, Apple, Baidu, Google, Meta, Microsoft, Tencent), but many of the companies involved are much smaller and not household names.¹⁵

Big Tech has already shaped our political and social world. The language largely being used today describes most of us as “data subjects,”¹⁶ and those who harvest, aggregate, and analyze the data, such as Big Tech companies, as “data collectors.” Subjects, as political scientists use the term, do not have the agency of citizens and are often restricted or denied participation in lawmaking and political participation.¹⁷ A passivity constrains subjects in this view.¹⁸ It also reduces us to “the subject” of the data when in fact we are, I argue, at least co-creators of data. We are critical to creating data, even if we're not the ones doing the collecting.

We facilitate the data collection process by actively using the apps and devices that collect these data about us. It doesn't seem tenable or even plausible to opt out, given how pervasively data are collected. Perhaps instead of being data subjects, we could be data citizens. Citizens participate in making and administering rules. Citizenship in our modern understanding of it is an idea used to think about our relationship to states. However, when it comes to technology issues, states have ceded their datafication leadership role to Big Tech. We are not citizens of corporations. Not all of us can afford to be shareholders, but we all can be *stakeholders*.

This is where—and why—using the language and mindset of human rights matters. As rights bearers, we have an interest, and indeed an entitlement, to act. Each of us, whether we know it or not explicitly, has a stake

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in datafication because of how pervasive datafication is.¹⁹ If we don't act, this trend will continue to distort not just economic relationships,²⁰ but our relationships to one another and to ourselves.²¹ Crucially, our target for human rights demands has shifted. Instead of a traditional focus almost entirely on public entities like states and what they do, we must seriously heed the calls by journalist Rebecca MacKinnon, political scientist John Ruggie, and many others, to apply human rights to the activities of private organizations like corporations.²² Big Tech's relentless march toward datafication has altered our very humanity.

We must pivot toward human rights because those rights make us all stakeholders in the world. Because of human rights, we have claims against oppressive, violating forces that restrict our bodies and our capabilities. The intensely voluminous and often invisible ways that data are routinely collected can make it seem that resistance is futile. Yet human rights have worked to make demands heard in the past, in situations that seemed just as totalizing.

Data-intensive technologies such as AI and their makers are not neutral, and they are not "for good." Although these technologies are made by people, they are not necessarily made for "all the people" or even "many people" in terms of thinking about potential harms alongside the benefits of advancements.²³ Awareness of the changes to our humanity that datafication brings will not be fully realized until it is clear to all of us what is happening. Awareness of what data do will not come about automatically or even through use of these data-intensive technologies. Comedian Bo Burnham's pandemic-era Netflix sensation *Inside* pokes fun at the many ways the Internet has changed people and how we relate to each other through constant connectivity.²⁴ *Inside* resonated with the mixed emotions during COVID-19 lockdowns that made us all embrace digital options. These technologies are too integrated, too naturalized, and, let's face it, often just exciting in ways that make us all kids again. Can we really just answer our doorbells through our phones or, better yet, have our doorbells identify who is at the door for us?²⁵

It's our role, as the sources of data, to demand protection from abusers of data. As stakeholders, with an interest in affecting how and for what purposes data about us are collected, embedded in social and political communities, we will make stronger demands. As stakeholders, we need information, and we need a conceptual understanding of how datafication

fundamentally changes how human lives are lived. Data literacy will strengthen us individually and collectively, as literacy is only meaningful for individuals in the context of collectivities in which we live. We don't stop at data literacy, however. We've already known for quite some time that digital technologies pose challenges for human rights. We need to go back to the motivation and basis for human rights—autonomy, dignity, equality, community—as inspiration for how to apply our existing array of rights to a datafied reality.

DATAFICATION FROM AN EXPLICITLY POLITICAL VIEW

My training is in political science. I've been a scholar of social movements and nongovernmental organizations (NGOs) working in the context of global politics for nearly two decades. I've written two award-winning books and dozens of shorter pieces about how NGOs transform international politics. I've interviewed and interacted with hundreds of present and former activists. All of them have labored for their causes because they felt the call for change from the status quo. They felt the stakes of not asking for change. They wanted to be heard in their protests of why the status quo does not work.

NGOs often channel activist demands. NGOs can't make change if they don't know what they are asking for. Still, not all NGOs or other civil society groups make clear demands in their work, even if their work is very clear to them. When working globally on human rights, the best way to get what you want is to keep saying the same thing, no matter where you are. The same messages can resonate across different cultures and geographies if we communicate with local specifics in mind.²⁶

So what's stopping us from acting? From my perspective as a political scientist, I see the power relationships between data sources and data collectors in both market and nonmarket terms. Sometimes it's hard to get to a mutually beneficial solution not just because it's expensive, but because other kinds of costs that are involved prevent collective action. First, we, the sources, haven't realized our stakes in datafication. Even so, we are disempowered individually from taking on the powerful interests that data collectors have locked into practices and policies. Yet taking collective action requires organization. Beyond monetary costs, collective action imposes costs for participants in terms of time, possible social consequences,

and work to coordinate people coming from different backgrounds. We know that in order for collective action to happen, usually the collectivity has to be small enough that people feel invested to act. Since datafication affects each of us, in order to solve this “collective action problem” globally, someone has to be willing to bear the costs of organizing because they see a benefit to doing so. This benefit can be market driven.²⁷ Or it can be normative.²⁸

When I teach international relations classes, my area of greatest interest is on the power of global norms. Although norms are nonbinding in the legal sense, they tell us about social and political bounds: whether behavior is appropriate or whether ideas are acceptable.²⁹ Norms constitute focal points around which discussion can begin and policy can be made. So what makes some norms stickier than others? And who gets to decide what the norms consist of? Sometimes we talk about issue or norm entrepreneurs who advocate ideas that stick at first in a few places and then globally.³⁰ Entrepreneurs set agendas, and they can take on some of the burdens of collective action. This is where others and I have argued that NGOs and social movements can have the greatest effect in global politics. Global norms and law around preventing torture, establishing LGBTQ+ rights, banning land mines and cluster munitions, and restricting trade on small arms would not have happened if activists were not setting the agenda at the global level.³¹

The road to changing norms is not typically smooth. Entrenched interests on the opposing side abound.³² Yet we should be considering how embracing stakeholdership can create new focal points for our practices and conversations about data. Data stakeholdership can set new agendas for datafication.

WHO ARE THE STAKEHOLDERS?

To demand means that you must be heard. To be heard, you must be persistently loud enough to be important. Data collectors have an advantage: they have collected, and will continue to collect, data about people from all of us. They have developed and govern the platforms that we use, and that is where they get their power. By contrast, our individual power is very limited. Similarly, the value of each individual person’s data appears negligible compared to the sea of data that collectors end up working with. Their loss of any individual’s data is hardly noticeable. The collectors care

little about individuals deciding to drop their devices, but to each of us, it is costly to stop using devices and services we find invaluable. We don't currently have a vocabulary to adequately express this dramatic imbalance of power and significance.

This book is for all of us who have been thinking hard about what to do with this imbalance that has been growing with the popularization of the internet and the rise of the digital economy. In the early days of the internet, it was easy to be hopeful about the human rights avenues that advances in information technologies would bring us. People reflected on how the internet could be used to circumvent government repression.³³ Yet as time has passed, we see how the internet is not a force for good and that developments into an internet driven by user-provided content and data (Web 2.0) and beyond have important effects on our dignity and our humanity.³⁴ But what aspects of our humanity matter in this discussion? What rights do we have, knowing that our data-hungry technologies are changing our lives as we use them?

This book is also aimed at and engages with work from other perspectives. I have drawn on work across social science and humanities fields, such as anthropology, communications, law, philosophy, science and technology studies, and sociology. These fields offer crucial insights, but they also reveal why political science's understanding of power and collective action must be part of the conversation that is already happening. I've dived into writing by computer scientists and other technologists who see even more change through the exciting work they're doing, but whose advancements lack some of the considerations those of us working in social science see as fundamentally unsettled, not proven. Ideas such as fairness, justice, and equality have been debated for centuries and are not easily solved by algorithms or collecting more data. In fact, data and algorithms can have detrimental effects for marginalized populations, as internet studies scholar Safiya Umoja Noble, political scientist Virginia Eubanks, and others have shown.³⁵

Most of all, the power of the language of human rights has been missing from a conversation about how data and AI change humanity, for better or for worse. It's about rethinking how fundamental values embedded in human rights—our only global expression of what needs to be protected about a universal human experience—can reshape our thinking about our relationship to data and give us tools to demand other changes. This is not

just knowing how to apply human rights to new digital realities because the reality is complicated, the issues and players are many, and in order to effect change, we need to try to simplify what the purpose of future regulation and rights making is trying to do.

WHAT THIS BOOK WILL DO

Few consumer products, like the Ring doorbell, consider human rights.³⁶ After all, video doorbells are useful and seemingly innocuous. Yet they have tremendous implications for human rights, and they reveal some gaps in our understanding of core ideas of autonomy, community, dignity, and equality.

Think about this through the lens of a fictitious family, the Madeups. The Madeups live in a major metropolitan North American city, with widely accessible public transit and lots of foot traffic on their street. Because they live in close proximity to bars, shops, and restaurants, the streets on Thursday through Saturday nights are often lively into the wee hours with rowdy late-night revelers or people simply getting lost. A mix of owners and renters occupy the beautiful heritage buildings.

The father, Jason, is a comic book artist-turned-marketing professional for an interior design firm. He spends a lot of time on social media for personal and work-related reasons, with a popular Instagram presence and a respected blog highlighting design choices for clients and his family, as well as cheeky opinions about design trends, pop culture, and armchair philosophy. The mother, Claire, is a high school math teacher whose career before marriage was as a software developer at a startup in Austin, Texas. In spite of her former career, she has always been more analog than her husband; their living room includes ceiling-to-floor bookshelves with books lining each shelf, and she spends a lot of time walking to local shops rather than shopping online. Their fifteen-year-old adopted twins, Jack and Corey, walk to and from school, spend hours on their Xbox and other online computer games, and frequently encourage their mom to buy the latest smart gadgets. Their most recent victory was getting her to buy a Ring doorbell. At first, the Madeups love the novelty of the Ring. They're able to answer the door through the app on their phones, so friends are informed "just a few minutes!," couriers are greeted, and the family can avoid the solicitors who come calling during dinner. Even Claire comes around a

little bit, especially since she can see when her kids get home every day if she has to stay late at work. After neighbors complain about parcels being taken by porch pirates, the Madeups expand the area of sensitivity of their Ring to capture more foot traffic. It makes them feel more neighborly, and they contribute footage to the Neighbors App by Ring, which provides a social media–powered neighborhood watch, allowing communities to share information and footage of possible criminal activity in the neighborhood.³⁷ The Madeups note there are neighbors who frequently post and investigate leads to help make the neighborhood safer. Jason admires their vigilance, especially with regard to keeping eyes on the kids on the street.

As she walks through their neighborhood one day, Claire notes how many homes have some kind of video doorbell on their porch, easily spotted because they are much larger than typical doorbells. By her count, there are fifty video doorbells on the short ten-minute walk between their home and the grocery store. Each of them is watching her. Claire thinks about her kids' daily routes to and from school, friends' houses, or cafés, oblivious to the doorbells tracking their movements, and then she thinks about who else walks down their street. Who is being watched? Every time she and Jason take advantage of their walkable neighborhood—to get coffee, ice cream, or dinner—these doorbells are watching. More concerning, she realizes the doorbells are mostly watching children in the neighborhood, people frequenting the services near their home, and people who have to walk or take public transit in order to go to work. Their faces and travels throughout the neighborhood are captured, video feed by video feed, creating a panoramic of neighborly doorbells pulling together a chronicle of all of us who use public spaces.

Jason and Claire argue about removing their Ring. Claire's claims are very broad, but mostly they rest on discomfort. She feels uneasy about being part of this video doorbell surveillance community that has become widespread within the small radius of their home. As much as she wants to put it out of her mind, Claire's realization can't be unrealized: the community feel of the street suddenly turns oppressive.

Jason feels frustrated. What difference does it make? They're not doing anything wrong. Aren't we concerned with the safety of the neighborhood, and aren't the benefits of reporting on suspicious package thieves and property trespassers more important than people being seen doing what they do, every day? Isn't ensuring Corey and Jack's safety what really matters?

Claire counters that the people choosing to install video doorbells aren't most of the actual people on the footage. Homeowners with perhaps good intentions are transgressing the rights of pedestrians simply moving in public without fear of surveillance, especially when some pedestrians have no way of avoiding the videos on their way to public transit.

Jason blogs a sanitized version of his argument with Claire, centering his views with what he thought were witty comebacks to his wife's concerns. To his surprise, his readers have mixed feelings. It's one of the most commented and polarizing posts he's ever had. Work colleagues write to tell him how deeply disappointed or strongly supportive they are. One commenter threatens to dox him after he appears on a couple of local radio shows. He's clearly hit a nerve. Jason feels mixed about the good feeling of his website traffic numbers going through the roof, yet some of the vitriol feels threatening.

In the meantime, Claire wonders what happens to all this footage. The teenage twins seem split. Corey supports her decision to disable the video and sound recording functions on principle. Jack points out that they now just have a very expensive doorbell with no real purpose. Plus, he argues all the other video doorbell users would have to disable theirs as well if we truly wanted to prevent neighborhood surveillance. Corey frowns: but shouldn't *someone* start? Maybe Claire, as a respected teacher, can convince others to do it too. After all, Claire has taught lots of neighborhood kids, and some of them are now adults living nearby. Jack rolls his eyes and shrugs.

Why should people have mixed feelings about a video doorbell? Some people might think trying to see Ring through the lens of human rights is trying to intellectualize a household product. Yet the growing phalanx of privately owned surveillance devices adorning the doors of modern society is about more than what one person feels about Ring and other smart technologies collecting data about any and all of us.

WHY HUMAN RIGHTS MATTER NOW, MORE THAN EVER

My intention is to articulate for readers why we need human rights in order to think about datafication as well as why data pose some major challenges to our existing conceptions of human rights. Transgressions of autonomy, community, dignity, and equality are why the Madeups' story should remind us that technologies such as the video doorbell, which sometimes

feel wrong, are indeed wrong: those transgressions have human rights implications.

Usefully the foundational values of autonomy, community, dignity, and equality give us the answer to the question: What are human rights for? Political scientist Jack Donnelly argues that “human rights . . . point beyond actual conditions of existence . . . to the possible. . . . Human rights are less about the way people ‘are’ than about what they might become.”³⁸ Thus, these four values together form a core by which people can live up to their potential. Although we might be tempted, it is impossible to boil down these four important words into simple definitions. We know broadly that autonomy means acting unencumbered in the world, making and acting on choices freely.³⁹ Community harkens to ideas about sociality and membership. Dignity is about the worth of a person, in both feeling and treatment. Finally, equality speaks to a desire to be treated without discrimination and in accordance to a certain baseline.

To date, these four human rights values have been anchored in the preservation of physical integrity—bodies acting, thinking, and learning. Datafication as currently practiced erodes our abilities to realize some of our basic human values because data operate in more invasive, invisible ways that are not always easily tied to physical transgressions.⁴⁰ Instead, as writers as varied as scholars from Ruha Benjamin, John Cheney-Lippold, and Ron Deibert to thought leaders like Jaron Lanier and Cathy O’Neil and others have pointed out to us, these invisible data have visible, tangible effects on and in human lives.⁴¹ The way datafication works is that it alienates people from the very data about them, gathered from them.⁴² It hides the human in the numbers,⁴³ shuffling those data into vast pools of data sets that are reworked “into a global mush.”⁴⁴

What seems obvious here is that if humans are involved in data, and human rights are about human potential, we should apply human rights frameworks to those data about humans. But if we imagine it would be easy just to “port” human rights from the analog to digital, we would be wrong.⁴⁵ We can’t just add human rights to emerging technologies and stir, expecting great things. We have to carefully consider the potential of human rights, and also its limitations, in shaping our futures.⁴⁶ What is clear is that international and domestic policymakers are not thinking about the basics of human rights, instead being pulled into fixing specific rights “gone wrong” in the digital age. Each chapter in this book examines how

our understandings of the basics of human rights—autonomy, community, dignity, or equality (sometimes several of them)—are fundamentally changing as a result of how data are being collected.

The difficulty stems from some peculiar qualities of data that I call “stickiness.” It means that data survive longer than most of us ever imagine, transformed as they often are during processes of datafication. All of this means, as we will see, that stickiness inhibits our ability to apply and even learn from human rights in the data arena. This does not mean human rights are not applicable to data, but it does mean we will have to disrupt our thinking: datafication is no longer “just” a problem of privacy, freedom of expression, or inequality of access.⁴⁷

HUMAN RIGHTS FOR A STICKY SITUATION

The human rights challenge is to reassert these values into our modern ways of living and inform our regulations and very philosophy of our relationship to data about and from us. We have to figure out how our “data doubles,”⁴⁸ “data bodies,”⁴⁹ or “data selves”⁵⁰ square with our physical lives. Being captured on video by a doorbell such as Ring seems innocuous enough, possibly even justifiable, if we think that that footage is brief and serves personal purposes such as keeping a protective eye on our children, or a larger social purpose, such as preventing crime. Many of us are used to (or often unaware of) being surveilled on closed-caption TV in stores, offices, and public spaces. But how those data of us are stored, used, analyzed, and repurposed are largely beyond our control, if even known to us. The footage from doorbells like Ring is digital. Under subscription plans, it can be downloaded and saved indefinitely by doorbell owners.⁵¹ That data of and about us—our appearance, our gait, our mannerisms, our faces—are sticky: once those data are stored and uploaded to the cloud, they are there, perhaps deleted automatically, typically not. Whether they’re downloaded, kept on someone’s phone, hard drive, or server, no matter: the data are sticky because they’re around, and it is hard to get away from or rid of them, even if you don’t know about them. That’s why Claire Madeup is so concerned.

Video doorbell data aren’t as directly controlled by their owners as their owners think either. Ring has partnered with at least 1,800 US law enforcement agencies and a handful of fire departments. These partnerships historically involve some demands to promote Ring in some way, such

as encouraging downloads of the Neighbors app, free doorbells, neighborhood maps of Ring users, and a portal that allowed police to directly request video footage, without warrants, from Ring doorbell owners. After repeated investigations and criticism of such marketing practices, Ring took steps in 2021 to make the process more transparent by having police publicly solicit footage from users through its Neighbors app. But police can still obtain warrants to gain access to footage directly from Ring if users do not want to volunteer video.⁵²

It's not just about public authorities like the police. High-profile hacks of Ring users' cameras and two-way speakers in addition to video doorbells made public some of the concerns of having these kinds of technologies in the home. One case involved an eight-year-old girl whose bedroom Ring camera was commandeered to yell racial epithets by a voice who claimed to be Santa Claus.⁵³

The private nature of datafication is two-fold. First, the technologies are largely owned by private entities, from the hardware of the doorbell itself to the software that powers the hardware, to the algorithms that analyze the data collected by the software on the back end. Second, the private, individual decisions to put up video doorbells have collective effects. Each neighbor might be doing so for justifiable reasons, but in effect, each doorbell collects information not just about that neighbor but whoever passes by that neighbor's house. In other words, these private decisions have individual *and* collective effects.

Besides video data, other types of data about us are connected in a sticky web that may ensnare us in the most unexpected times. Many of us may not yet have encountered the bad effects of data's stickiness. Consider the stories of two women whose credit and background data stuck to them and caused problems years later. For years, Rafaela Aldaco had struggled with financial instability.⁵⁴ She felt she could forge a new path when she learned she had been accepted by a housing program designed to help struggling folks like her. This single mom of two, however, was confronted with her past when she showed up to get her key. Program officials told her they had changed their decision. It turns out a tenant screening report by RentGrow, one of many companies offering background checks, returned a record for a battery conviction when she was eighteen years old. This was supposed to have been removed from her record in exchange for community service and six months of probation.⁵⁵ She lost both the apartment and her eventual legal

suit against RentGrow for using that information. Aldaco learned painfully that just because her criminal record had been expunged by the courts, it hadn't been deleted or purged from other databases.⁵⁶ Courts decided RentGrow had the right to use the information.

Things turned out differently in Samantha Johnson's encounter with sticky data. In 2018, she was apartment shopping in Oregon. Automated background reports, which landlords increasingly rely on, turned up the following records on her: "Burglary and domestic assault in Minnesota. Selling meth and jumping bail in Kentucky. Driving without insurance in Arkansas. Disorderly conduct. Theft. Lying to a police officer. Unspecified 'crimes.' Too many narcotics charges to count."⁵⁷ In fact, these charges were not Johnson's. Hers is a common name, but the algorithms don't know the social significance of that. They lumped her in with five other women, including someone in jail at the time. Johnson was lucky: she convinced a landlord that the record was not hers and was able to get a place to live. Johnson was given a chance to plead her case directly in spite of the data associated with her.

Both Aldaco and Johnson encountered restrictions in their ability to move around in the world because of sticky data. The difference in their cases speaks to questions of how data affect us differently, depending on our demographic characteristics or our individual abilities to convince others to have a face-to-face interaction despite being weeded out by an algorithm. Stickiness is not experienced evenly. Factors such as race, class, or occupation, often can exacerbate the stickiness of data, highlighting how equality as a value of human rights is affected. But for all of us, data's stickiness affects human rights concerns like autonomy. Aldaco's situation also speaks to one of dignity. Past crimes of her youth continue to dog her, even as she tries to overcome those mistakes. If the internet remembers everything, at what point can we as human beings allow people to move past their pasts?

Whether we're talking about the stickiness of credit scores or video, or other data about people such as their heartbeats, sleeping habits, and social media history, these are all changing the way we think about "community." What we know about one another and ourselves, and how that affects our sense of belonging, has changed dramatically with datafication. Although data are sticky by design, we can regulate that stickiness to make it less tacky or reorient our expectations so that facts can be moderated. By

confronting these changes to our sense of human autonomy, community, dignity, and equality, we can use human rights as a focal point around which to gather as data stakeholders. As stakeholders, we should be participants in rewriting the terms and conditions under which data about people are being used.

WHERE THIS BOOK GOES

This book is agenda setting. By casting the net far beyond my usual political science waters, I aim to redirect conversation about everyday, data-intensive technologies that have seeped into our lives. I explore power, collective action, and our humanity through the lens of human rights. I apply my expertise in human rights, social movements, and global norms to the study of datafication through emerging technologies.

Stakeholderism by its nature embraces community and shared understandings, and it captures the interests of our collectives, however we define them. Our digital world, and the datafication brought about by AI and data-intensive technologies, is a collective reality. We may all experience this reality somewhat differently, but the datafication infuses our lives. Human rights provide a vocabulary of entitlement and a universal mindset critical to reining in data-intensive technologies. It grounds our stakes in ways that cannot be easily replicated.

In an effort to demonstrate the breadth of datafication experiences that should include human rights considerations, each of the chapters in this book serves two purposes. The first is to articulate how datafication changes human experiences. The second is to draw readers' attention to areas where human rights can help us insert ourselves more actively as data stakeholders, whether to shape conversations around data-intensive technologies, or to make demands of policymakers and data collectors to protect core values.

Chapter 2 reviews core terms and concepts of the book, including data stickiness, stakeholderism, the link between algorithms and data, and why datafication currently eludes our best human rights-informed efforts. We discuss how countries, which used to be the main targets and guardians of human rights work, have become less important and why.

We then investigate how datafication has created vexing human rights consequences. Chapter 3 treads into the topic of data rights. Although it's tempting to claim "our data," we'll see why data about people aren't

actually “ours” in a straightforward sense. At once cognate to human rights and existing property rights, data rights begin running aground when we think of the stickiness of data and the co-creation of data. Indeed, data exist only with a source and a collector. Neither party, especially in the context of data about people, has full claim on the data. We explore existing perspectives that emphasize privacy, property, and “the right to be forgotten” and demonstrate how co-creation hinders all of those methods of defining rights. Unless we direct our efforts to recognizing the co-creation and collective nature of data, declarations of data rights will fall short of accounting for autonomy and dignity. Chapter 4 examines the topic of facial recognition technology (FRT). Commonly deployed and not well explained, FRT takes a mundane yet central feature of people—our faces—and transforms them into data that can be compared to other data to make inferences about people. Since faces are personal and core to how we understand human dignity, FRT’s datafication of our faces challenges our ideas about dignity. In terms of equality, the way FRTs have been deployed has been shown to be biased against certain races and genders. Their ubiquity in the hands of corporate and government officials certainly raises challenges for autonomy and potential concerns for human community when deployed against certain groups.

Turning toward a more morbid topic, chapter 5 explores what happens to data about us when we die. We look into digital immortality enthusiasts and others who are creating chatbots based on data from real people. The boundary between living and dying in a datafied world is increasingly fuzzy as we explore technologies that can keep at least certain aspects of people alive when they have physically perished. Questions of human dignity and autonomy abound, especially when we currently do not have ways for people to opt out of posthumous uses of data about them. In chapter 6, we consider the implications of Big Tech’s role in the global governance of data. Governance has been a significant preoccupation for political scientists, as it is so central to ideas about power and distribution. Here, we look at the Oversight Board that Facebook (which has since renamed itself Meta) started as a way to govern content on its platforms. The establishment of the board explicitly states that it will help ensure freedom of expression, a task usually left to governments. The chapter explains the consequences for human rights when nonstate actors such as corporations start governing in these areas through their platforms and explicit bodies as the board.

Chapter 7 is a declaration for all of us to consider data literacy a human right and an argument for why we need this particular right in the age of datafication. By expanding on the existing right to education, a right to data literacy is an adaptation of education efforts for the digital age.⁵⁸ If data literacy becomes an integral component of our education in the same way many literacy standards include linguistic and numerical literacy, we may develop the core competencies for data stakeholderism. Chapter 8 lays out future directions and hopes for thinking through how human rights might shape data-intensive technologies and policies regarding data collectors.