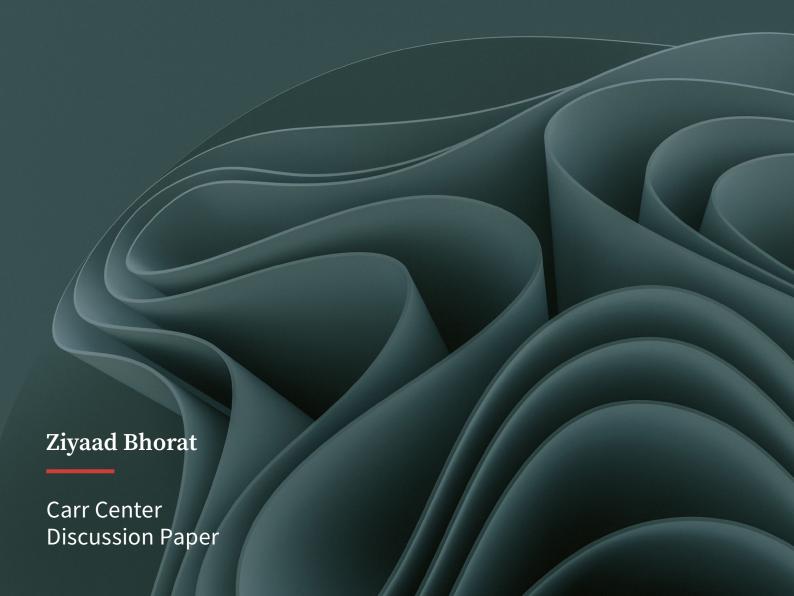


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Automation Anxiety

And a Right to Freedom from Automated Systems and Al



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ABSTRACT

Rapid advances in AI have created a global sense of urgency around the ways that automated systems are changing human lives. Not all of these changes are necessarily for the better. On what basis, therefore, might we be able to assert a right to be free from automated systems and AI? The idea seems absurd, given how embedded these technologies already are and the improvements they have generated in contemporary life when we compare with prior periods in human history. And yet, there are good grounds for recognizing a general entitlement to protect at least three important human abilities: i) to work; ii) to know and understand the source of the content we consume; and iii) to make our own decisions. Understood comprehensively, a right to freedom from automated systems and AI could mean that individuals and communities are presented with alternative options and/or leverage to keep them from losing these abilities long cherished in the history of human development. Such a right does not call for dismantling the technological age, but rather designates what we ought to contest and protect in a world with a precarious dependence on technology.

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I. Introduction

It is fair to say that, in the present moment, generative artificial intelligence (AI) has stoked a global frenzy from all corners, sectors, and disciplines as scholars and practitioners alike come to terms with both its novelty and the idea that its "future ubiquity in society seems assured." The possibility, therefore, that we might assert some kind of right to be free from automated tools and systems, including AI, seems unrealistic. Automation and technologies like AI are built on the back of a much longer process of industrial and technological development in human history that has seen humans move away from paleolithic conditions of, inter alia, "recurrent rounds of feast and famine," drastically lower average life expectancies, and "especially high" infant and childhood mortality rates.2 With such improved health and overall wealth outcomes, it seems even reckless to suggest any romantic return to a prior technological state. Automation, which I define as the general substitution or augmentation of human work with artificial tools capable of acting themselves to complete tasks, is one of humanity's most revolutionary technological achievements. It sits at the core of many technological applications that have improved our lives by bringing us together, helping us with work and tasks, and saving us from harm and hazard. Because of these technologies, we have been able to send humans into space and onto the moon—something that was impossible in earlier times.

Given the ability of these new technologies to improve human life, it might therefore be surprising to find increasing signs of worry about our new relationships with, and dependencies on, automation and AI. And yet, this is precisely the situation in which we find ourselves. In 2018, the European Union's (EU) General Data Protection Regulation (GDPR) came into force with a striking clause enumerating a "right not to be subject to a decision based solely on automated processing." In the United States, President Joe Biden's White House published a set of principles on AI aimed at "making automated systems work for the American people," the Blueprint for an AI Bill of Rights, which moreover contains language against the "use of techno-

logy, data, and automated systems in ways that threaten the rights of the American public." Automated systems here include, but are not limited to, "artificial intelligence techniques." In short, people and governments are concerned, and are finding ways to assert themselves against any technological developments running counter to their interests. This is, in fact, nothing new. Firstly, as we will see, history is replete with a general anxiety regarding automation and automated tools. This anxiety has a genealogy that stretches all the way back into antiquity.

Secondly, we will analyze three areas of concern which provide good grounds for recognizing a general right to be free from automated systems and AI. These areas related to our abilities i) to work, ii) to know and understand the source of the content we consume, and iii) to make our own decisions.

"History is replete with a general anxiety regarding automation and automated tools. This anxiety has a genealogy that stretches all the way back into antiquity."

What this analysis will moreover demonstrate is that people are already asserting themselves against the ubiquitous use and deployment of automated systems and tools like AI, and thereby illustrate the terrain over which a right to freedom from automated systems and AI is being litigated in practice. As such, these three areas of concern are the building blocks of a right that can be understood more comprehensively in response to automation as a distinct phenomenon in human life and show how a general anxiety creates a legitimate basis for such an entitlement to exist.

¹ Chris Stokel-Walker and Richard Van Noorden, "What ChatGPT and Generative Al Mean for Science," Nature 614 (2023): 215–216, 215.

² Cameron Rondo, A Concise Economic History of the Word: From Paleolithic Times to the Present (New York: Oxford University Press, 1993 [1989]), 21.

³ Art. 22, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016.

⁴U.S. Office of Science and Technology Policy, "Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People," https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf, October 2022, 1–3.

⁵For a contemporary account deploying the notion of "anxiety" with respect to automation, see Daniel Akst (2013), "What Can We Learn from Past Anxiety over Automation?," *The Wilson Quarterly* (Summer 2014), https://www.wilsonquarterly.com/quarterly/summer-2014-where-have-all-the-jobs-gone/theresmuch-learn-from-past-anxiety-over-automation; Carl Benedikt Frey, Thor Berger, and Chinchih Chen, "Political Machinery: Did Robots Swing the 2016 US Presidential Election?," *Oxford Review of Economic Policy* 34 (2018): 418–422, 419 (a previous version was titled "Political Machinery: Automation Anxiety and the 2016 U.S. Presidential Election;" and Cynthia Estlund, *Automation Anxiety* (Oxford: Oxford University Press, 2021).

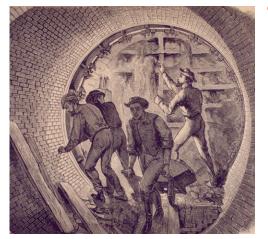
II. Automation, Anxiety, and Right

Automation is the core phenomenon behind the advent of advanced automated systems like AI. While we might have an intuitive idea about what automation is, its many definitions are domain dependent. US industrialist, John Diebold, is usually credited as one of the first pioneers of the term in the 1950s, while admitting that "automation" owes its terminological existence to its relative "ease of spelling." In 1955, the US Congress organized a series of hearings for a report on "Automation and Technological Change," where Otto Pragan, Research Director of the Inter-

national Chemical Workers Union, aptly summed up a position no less relevant for today: "I am not going to try and give you a definition of automation, because I am sure you have heard as many definitions as you have had people testify here." Indeed, while some contemporary economists have defined automation as "using machines and computers to substitute for human labor in a widening range of tasks and industrial processes,"8 other sociologists and engineers have cast a wider net, defining the term as any specific "labor-saving technical innovation" that "fully substitute[s] for human labor"9 or "dynamic processes...captured over

time and specifically modified, that they can independently execute predefined tasks and functions," respectively. To talk about automation in a meaningful sense across intuitions and domain boundaries, it is reasonable therefore to define it for our purposes as the *general substitution or augmentation of human work with artificial tools capable of acting themselves to complete tasks.* Zoologist Antone Martinho-Truswell captures the importance of this phenomenon in human life as follows: "To automate is human. It's not tools, culture or communication that make humans unique but our knack for offloading dirty work onto machines." 10

One of the things that makes automation such a striking phenomenon in human history is the anxiety and unease it continues to elicit in us, even as it promises a release from labor. In antiquity, Aristotle's *Politics* specified how slavery and subordinate craft laborers would not have been necessary if some kind of self-acting tools were possible, implicitly creating a despotic functional equivalence between slaves, subordinate workers, and automated tools in the work they perform¹¹. Because automated tools in theory promised economic freedom and redistributed despotic



"To automate is human. It's not tools, culture or communication that make humans unique but our knack for offloading dirty work onto machines."

Underground tunneling machine used to help dig the New York City subway line along Broadway, 1872

labor relations—a view that continues to endure in the contemporary period¹²—they tend to offer a radical destabilization of the status quo. In practice, however, workers found themselves competing for conditions of work dictated by those who controlled their labor and who could now substitute for it with functional equivalents. Perhaps most recognizable were the Luddites, a name given to loosely organized groups of textile workers in early 19th century England, who protested and broke machines not because they were universally technophobic, but because they "opposed the use of machines whose purpose was to redu-

⁶ John Diebold, *Automation: The Advent of the Automatic Factory* (New York: D. Van Nostrand Company Inc, 1952), ix.

⁷ United States Congress, Joint Economic Committee, *Automation and Technological Change: Report of the Subcommittee on Economic Stabilization to the Joint Committee on the Economic Report* (Washington D.C.: U.S. Govt. Print. Off, 1955), 151.

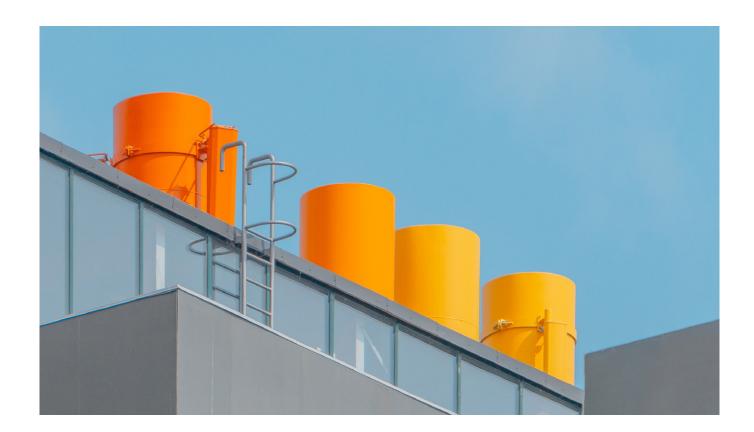
⁸ Daron Acemoglu and Pascual Restrepo, *Artificial Intelligence, Automation and Work*, Working Paper No. 24196 (Cambridge: National Bureau of Economic Research, 2018), 3.

⁹ Aaron Benanav, Automation and the Future of Work (London: Verso, 2020), 5.

¹⁰ Antone Martinho-Truswell, "To Automate is Human," *Aeon* (February 13, 2018), https://aeon.co/essays/the-offloading-ape-the-human-is-the-beast-that-automates.

¹¹ Pol. 1. 1253b33–1254a1. For an overview of early automata in classical antiquity see Adrienne Mayor, *Gods and Robots: Myths, Machines, and Ancient Dreams of Technology* (Princeton: Princeton University Press, 2018).

¹² For example: William M. Freeman, "Automation Aims at New Freedom," *The New York Times*, (January 3, 1955), https://www.nytimes.com/1955/01/03/archives/automation-aims-at-new-freedom-devices-that-run-factories-promise.html can be read with John Danaher, *Automation and Utopia: Human Flourishing in a World Without Work* (Cambridge: Harvard University Press, 2019).



ce production costs" through decreased hours or wages¹³. Marx's invective against capitalism and the industrial factory, the "mechanical monster" with "demon power" that turned humans into mere organs,¹⁴ is in part an artifact of this anxiety writ large into a powerful, compelling, and persistent ideology.

"Automated tools and systems continue to generate anxieties that form the discursive basis of socially legitimate entitlements already cropping up in legal systems worldwide."

To talk then of a *right* to freedom from automated systems like AI has roots in a genealogy of real anxiety about this technology. But it need not start with or even necessarily imply a "state-enforced" entitlement over a kind of rights-

based thinking that stresses a more socialized "logic" of "entitlement," or a behaviorist and phenomenological situation which Kojève explains as "having the *droit to.*" Put another way, in what way can a socially legitimate negative entitlement, "I have the right to freedom from..." emerge in the context of automation and AI? To answer this, we can consolidate and analyze three important abilities that individuals and communities have identified as worth protecting in response: work; knowledge and understanding of what we consume; and decision-making. In sum, automated tools and systems continue to generate anxieties that form the discursive basis of socially legitimate entitlements already cropping up in legal systems worldwide.

III. Work

Automated systems and AI can undermine our ability to work on two key dimensions: substitution; and core skills atrophy.

¹³ Kevin Binfield, Writings of the Luddites (Baltimore: Johns Hopkins University, 2004), 3.

¹⁴ Karl Marx, *Das Kapital: Kritik der Politischen Oekonomie – Buch I: Der Produktionprocess des Kapitals* (Hamburg: Otto Meissner, 1867), 367–367. Translation edition by Ben Fowkes (London: Penguin, 1976), 503.

¹⁵ Amia Srinivasan, *The Right to Sex* (London: Bloomsbury, 2021), 102, 121.

¹⁶ Alexandre Kojève, Outline of a Phenomenology of Right, trans. Bryan-Paul Frost and Robert Howse (Lanham: Rowman & Littlefield, 2000 [1982]), 35–36.

A) SUBSTITUTION

Firstly, as the Luddite experience shows us, automation means that workers compete in their conditions of work with functional substitutes. The view of economists and sociologists here is mixed—on one hand there can be an interaction of effects as automation displaces labor, but also increases productivity and demand for labor in other sectors, and reinstates labor as it creates new tasks where labor has a comparative advantage.17 Even though automation does "alter the types of jobs available and what those jobs pay...while wage gains [have gone] disproportionately to those at the top and at the bottom of the income and skill distribution, not to those in the middle," it can also therefore complement labor.18 On the other hand, a longer process of "[d]eindustrialization can be said to find its origins not in runaway technical change but rather in worsening overcapacity in world markets for manufactured goods...More and more is produced with fewer workers, as the automation theorists claim, but not because technological change is giving rise to high rates of productivity growth."19

Moreover, the optimistic vision of automation that associates it with freeing labor up for new and better tasks often fails to confront the granularity of the processes that need to occur for this to happen successfully. Workers often demand assurances before accepting firm-level decisions regarding automation, and the reality is that there are often protracted battles between firms and workers on labor-displacing automation. If workers do not belong to unions, they have a decreased capacity to make successful demands. Moreover, relative union strengths across industries and regions can lead to markedly different outcomes on the same issue of automation. By way of example, self-checkout technology in South African retail faces a very different set of circumstances to places like the UK or US. With historically powerful unions in the post-Apartheid era and high unemployment, South African firms wanting to introduce automated self-checkout technology meet ongoing resistance from workers.²⁰ In 2016, one of South Africa's largest retailers, Pick n Pay, faced boycotts from the nation's largest union, Congress of South African Trade Unions (COSATU), for their piloting of self-checkout technology.21 Pick n Pay scrapped the trial



Automated self-checkout machine at a grocery store

run soon thereafter. Did South Africa miss out? Perhaps, if we believe that self-checkout technology is a universally a better thing. However, this is far from certain, for firms, workers, and consumers. With the introduction of self-checkout, firms need to account for new forms of maintenance, theft, and operational bottlenecks, while consumers shoulder the burden of work themselves, even if they might perceive it otherwise. Workers are actually displaced or potentially face the threat of displacement down the line.²²

Political leaders are reluctant to intervene in fights between firms and workers, especially across complex global supply chains. But neglecting automation-induced un(der)employment, worker anxieties, and the destabilizing effects that this has on communities, can be politically costly. For example, the outcome of the 2016 US Presidential election was in part shaped by a "rage against machines" mentality that existed in voting districts facing higher likelihoods of automation in the workforce.²³ This strongly suggests we should be bolstering both international and domestic labor protections around automation. Firms should be required and/or incentivised to exhaust all options for preserving labor and/or wages in automation decisions. A 2022 report by the US Congressional Research Service on automation and public

¹⁷ Daron Acemoglu and Pascual Restrepo, "Automation and New Tasks: How Technology Displaces and Reinstates Labor," *Journal of Economic Perspectives* 33 (2019): 3–30.

¹⁸ David Autor, "Why Are There Still So Many Jobs? The History and Future of Workplace Automation," Journal of Economic Perspectives 29 (2015): 3–30.

¹⁹ Benanav, Automation and the Future of Work, 23–24.

²⁰ Felix Adamu Nandonde and John L. Stanton, eds., Supermarket Retailing in South Africa (New York: Routledge, 2022), 99–100.

²¹ Admire Moyo, "Furore Over Pick n Pay's Self-Service Tills," ITWeb (September 29, 2016), https://www.itweb.co.za/content/xo1Jr5MxpewMKdWL.

²² See Christopher K. Andrews, The Overworked Consumer: Self-Checkouts, Supermarkets, and the Do-it-Yourself Economy (Lanham: Lexington, 2019).

²³ Frey, Berger, and Chen, "Political Machinery," 419.

"While automation and AI raise the possibility of developing new and exciting skills to improve our lives, the issue here is the possibility of these coming at a cost to foundational skills and a reliance on artificial means to substitute for them."

Ziyaad Bhorat Carr Center Technology & Human Rights Fellow finance suggests that there is much to do here still: "the federal income tax offers no targeted incentive for employers to invest in worker training."²⁴ Public interventions will go a long way towards fulfilling the spirit of legal protections on work that have emerged in international law instruments, including "the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment,"²⁵ and "technical and vocational guidance and training programmes, policies and techniques to achieve steady economic, social and cultural development and full and productive employment."²⁶

B) CORE SKILLS ATROPHY

Another anxiety with automation and AI in our ability to work is a tendency to degrade or atrophy core skills. It is perhaps Rousseau who states this issue most acutely in the Second Discourse when discussing how indigenous people living in what is now South Africa "catch sight of vessels on the high seas with their naked eyes from as far away as do the Dutch with spyglasses," since the latter have become dependent on, and refined by their artificial tools

and relatively decadent lives.²⁷ These problems with deskilling have been identified as a result of automation in situations that include aviation, where pilots face issues with manual cognitive tasks otherwise performed by automated equipment.28 This moreover raises the spectre of safety in cases where automated systems fail and pilots are impaired in their ability to respond on the job. In clinical medicine, this problem is perhaps even more acute even as new advances in machine learning and AI have made for revolutionary techniques in diagnostics and treatment. Core skills can still degrade when clinicians are overly dependent on automated systems and tools, and bias prescriptions from these sources over inputs from a broader array of sources and contexts. Aside from deskilling, failure, and bias, automated systems can also behave in unexpected ways that present new challenges to clinicians.²⁹ While automation and AI raise the possibility of developing new and exciting skills to improve our lives, the issue here is the possibility of these coming at a cost to foundational skills and a reliance on artificial means to substitute for them.

IV. Knowing and Understanding What We Consume

Automation and automated systems have long created anxiety amongst blue-collar workers. As we have just seen, professionals like doctors and pilots are increasingly and understandably concerned about how automated tools will shape their skills. Now that communications media and artistic outputs can be generated by automated means, an even broader group of people find themselves affected by the tides of automated systems and AI. These include artists, lawyers, knowledge workers, and other professionals. Of course, a key benefit of these generative tools, like ChatGPT and DALL-E, is the ability for humans and non-humans to produce new things together in ways that were previously impossible. But this new content also deepens and extends further anxieties around our ability to know and understand the things that we consume. Algorithms, in particular,



There is a risk of core skills degrading when clinicians are too dependent on automated systems.

²⁴ Gary Guenther, *Automation, Worker Training, and Federal Tax Policy* (Washington D.C: US Congressional Research Service, 2022).

²⁵ Art. 23, United Nations General Assembly, *The Universal Declaration of Human Rights (UDHR)* (New York: United Nations General Assembly, 1948).

²⁶ Art. 6, United Nations General Assembly, International Covenant on Economic, Social and Cultural Rights (New York: United Nations General Assembly, 1966).

²⁷ John T. Scott, trans., *The Major Political Writings of Jean-Jacques Rousseau: The Two Discourses and the Social Contract* (Chicago: University of Chicago Press, 2012), 71.

²⁸ Stephen M. Casner, Richard W Geven, Matthias Pecker, and Jonathan W. Schooler, "The Retention of Manual Flying Skills in the Automated Cockpit" *Human Factors* 56 (2014): 1506–1516.

²⁹ Federico Cabitza, Raffaele Rasoini, and Gian Franco Gensini, "Unintended Consequences of Machine Learning in Medicine," *JAMA* 318 (2017): 517–518; Keith J Ruskin, Chase Corvin, Stephen C. Rice, and Scott R. Winter, "Autopilots in the Operating Room: Safe Use of Automated Medical Technology," *Anaesthesiology* 133 (2020): 653–665.

have already been identified as a "black box" inaccessible to users and individuals that they affect: "secrecy is approaching critical mass, and we are in the dark about crucial decisions"³⁰

Synthetic media and content generated by automated systems also raise crucial questions about, inter alia, copyright exploitation,³¹ fraud and deceit, plagiarism, and authenticity regarding whether something was produced with humans largely out of the loop or not.³² Knowing that something was produced by automated systems like genera-

tive AI is somehow important to us, and so content consumers and reviewers are understandably concerned about our ability to know and understand what it is we are consuming. By way of example, the fact that the winner of the highly-publicized Colorado State Fair's digital art category was said to have "disclosed Midjourney's involvement when submitting his piece," tells us that knowing the source and method of production is important to us when it comes to generative AI products—especially in cases where the stakes are competitive.

In fact, the global movement in the last few decades to know more about the food we consume is in many ways a model for how we might think about the digital content that we use and consume. In the context of chronic disease prevention and genetically modified organisms (GMOs), the battle for detailed *food* nutrition labels could provide useful lessons for transparent *digital content* generation. Firms like IBM are already stressing transparency in the production and deployment of automated systems and tools in order to anticipate regulatory efforts. IBM's AI Factsheets aims to "foster



Detail of the AI-generated painting Théâtre D'opéra Spatial by Jason Allen

trust in AI by increasing transparency" and allow "AI consumers to better understand how the AI model or service was created."³⁴ Other examples include a growing industry around detecting and/or watermarking synthetic media and generative AI content, including OpenAI's proposed investments in labelling to give consumers the ability to distinguish between content directly created by humans and synthetic media.³⁵

By far the most sophisticated, though incomplete, regulatory treatment on this topic to date is the proposed EU AI Act (the

Act). The Act reinforces that people should have the ability to know and understand the digital content they use and consume, and contains language requiring that people "be notified that they are interacting with an AI system" except if this is already obvious. The Act also provides that actors using an "Al system to generate or manipulate image, audio or video content that appreciably resembles existing persons, places or events and would falsely appear to a person to be authentic, should disclose that the content has been artificially created or manipulated by labelling the artificial intelligence output accordingly and disclosing its artificial origin."36 The Act therefore illustrates how anxieties about the source and production of content produced by automated means are already turning into real legislative efforts. In this new age of automation, we want to know more about the source of our digital content, and demand that any content produced with minimal human input be transparently labelled. We ought to insist on this, irrespective of what we do with the information provided.

 $^{^{30}\,}Frank\,Pasquale, \textit{The Black Box Society: The Secret Algorithms That\,Control\,Money\,and\,Information}\,(Cambridge, Harvard\,University\,Press, 2015), 4.$

³¹ Giorgio Franceschelli and Mirco Musolesi, "Copyright in Generative Deep Learning," *Data & Policy* 4 (2022): 17.

³² Yogesh K. Dwivedi et al, "Opinion Paper: 'So What if ChatGPT Wrote it?:' Multidisciplinary Perspectives on Opportunities, Challenges and Implications of Generative Conversational AI for Research, Practice and Policy," *International Journal of Information Management* 7 (2023): 102642.

³³ Kevin Roose, "An A.I.-Generated Picture Won an Art Prize. Artists Aren't Happy," *The New York Times* (September 2, 2022), https://www·nytimes·com/²⁰²²/0⁹/0²/technology/ai-artificial-intelligence-artists·html·

³⁴ Tristan Greene, "Why IBM's AI Fact Sheets Should be the Industry Standard," *The Next Web* (December 9, 2020), https://thenextweb.com/news/why-ibms-ai-fact-sheets-should-be-the-industry-standard.

³⁵ Melissa Heikkilä, "A Watermark for Chatbots Can Expose Text Written by an Al," *The Next Web* (January 27, 2023), https://www.technologyreview.com/2023/01/27/1067338/a-watermark-for-chatbots-can-spot-text-written-by-an-ai/.

³⁶ Preamble, ¶ 70, European Commission, Laying Down Harmonized Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts (Brussels: European Commission, 2021).

V. Making Decisions

Finally, automated systems and AI are increasingly being used to make decisions that affect us, impacting our own abilities to do so for ourselves. On one hand, automated decision-making (ADM) proposes to allow us to make better decisions in a complex world with many options. But on the other, and in its more pessimistic case, we face the possibility that our ability to make decisions is largely supplanted and eroded. This is a major threat to human autonomy. As a result, it has become important to identify, measure, and evaluate whether ADM systems are in fact being deployed in ways that enhance human life and public benefit, while preserving decision-making autonomy. AlgorithmWatch, a civil society organization, offers tools to map ADM systems and has focused on Germany in its "Atlas of Automation" to evaluate whether these systems and tools are promoting social participation.³⁷ In some cases, taking humans out of the decision-making loop could possibly improve fairness and efficiency—for example taking out the bureaucratic sting of renewing drivers' licenses in person.

But ADM can also have material negative consequences for the provision of, and equitable access to, public goods and services. This problem is especially acute in historically marginalized communities and/or groups with differing levels of technological use. Equity here recognizes that access to digital goods and services is not the same for all groups, and not everyone is equally able to shoulder the burden of distributive failures. Consequently, ADM can affect the exercise of other fundamental rights beyond decision-making autonomy. Virginia Eubanks has shown how predictive algorithms used in US public agencies continue to make highly sensitive and consequential decisions in areas such as child protection, homelessness, and welfare provision: "Automated decision-making shatters the social safety net, criminalizes the poor, intensifies discrimination, and compromises our deepest national values. It reframes shared social decisions about who we are and who we want to be as systems engineering problems."38

Moreover, an increased dependency on ADM systems and tools runs the risk that we jeopardize our ability to cultivate moral and political excellence in communities and amongst individuals. For example, by substituting out deliberative decision-making to automated systems and away from ordinary people, "AI based decision making is gradually replacing the need to naviga-

"It has become important to identify, measure, and evaluate whether automatic decision-making systems are in fact being deployed in ways that enhance human life and public benefit, while preserving decision-making autonomy."

te, weigh and assess stories" and "risks demoralizing us and our activities because a big part of what it means to be moralized is to use practical judgment or phronesis."³⁹ The educational experience in learning how to make good decisions and engaging our ability to do so through deliberation and decision-making has been a cornerstone of social and political thought since antiquity. The problem is that if we automate decision-making in our moral and political lives, we run the risk of accepting a far more circumscribed ability for humans to develop this in, and for, society. In this world, and as Bernard Stiegler puts it, "[d] igital automata have succeeded in bypassing the deliberative functions of the mind."⁴⁰

Here again emerging legislative efforts have begun to realize the importance of ensuring that people do not lose their ability to make decisions, sit at the apex of decisions that significantly affect their lives, and are able to have a say in and/or challenge automated decisions that meaningfully affect them. As we have already seen, the EU's GDPR offers a qualified right on these points: the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal or other significant effects concerning people—setting out certain exceptions. There have also been calls in the UK for an ombudsman dedicated to algorithmic decision-making in order to ensure that these decisions can be suitably challenged in the various sectors in which they are deployed. In essence, the core concern and anxiety here is that people retain the final say in making decisions that affect them.

 $^{^{37}}$ AlgorithmWatch, *Atlas of Automation: Automated Decision-Making and Participation in Germany* (Berlin: AW AlgorithmWatch, 2019), retrieved from https://atlas.algorithmwatch.org/wp-content/uploads/2019/04/Atlas_of_Automation_by_AlgorithmWatch.pdf.

³⁸ Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* (New York: St. Martin's Press, 2017), 12.

³⁹ Nir Eisikovits and Dan Feldman, "Al and Phronesis," *Moral Philosophy and Politics* 9 (2022): 181–199, 190.

⁴⁰ Bernard Stiegler, "Automatic Society, Londres Février 2015," trans. Daniel Ross, Journal of Visual Art Practice 15 (2015): 182–203, 194.

⁴¹ Artificial Lawyer, "UK Lawmakers Debate Al's Legal & Regulatory Issues," *Artificial Lawyer* (March 28, 2023), https://www.artificiallawyer.com/2017/03/28/influential-uk-lawmaker-asks-do-we-need-an-ai-ombudsman/.

"The educational experience in learning how to make good decisions and engaging our ability to do so through deliberation and decision-making has been a cornerstone of social and political thought since antiquity... if we automate decision-making... we run the risk of accepting a far more circumscribed ability for humans to develop this in, and for, society."

Ziyaad Bhorat Carr Center Technology & Human Rights Fellow

VI. Conclusion

We have seen how automated systems and tools, including AI, continue to generate anxieties regarding core areas of human life and ability: i) work; ii) knowing and understanding the content we consume; and iii) making decisions. These anxieties are increasingly emerging as disparate protections in rightsbased regulatory frameworks, although they are yet be consolidated around automation as a distinct and revolutionary phenomenon in human history. Stiegler's work on "automatic society" makes a compelling argument that modern technology has fundamentally changed human abilities in ways that are not always positive, and worryingly negative, in certain key areas: since the 19th century, successive waves of technological proletarianization means humans have first lost the knowledge of how to make and do (savoir-faire), then the knowledge of how to live (savoir-vivre), and now theoretical knowledge (savoirs théoriques).42 To talk, therefore, of having a legitimate social entitlement in a "right to freedom from automated systems and AI" implies that we assert concretely the importance of ensuring that there are ways and means to protect us from losing abilities we have come to cherish in human life, and that we are adequately provided with alternative options in a world increasingly reliant on automation technologies. (Over)reliance on the tall technological stilts of automation technologies is, moreover, incredibly risky in a world where geopolitical warfare (e.g. Russia/Ukraine) and global energy crises continue to test society's resilience to technological disruption and outright failure.

How then, should we comprehensively view automation anxiety and a right to freedom from automated systems and AI? Some of areas of focus emerging from this discussion include the following:

- + Framing automation as a political issue instead of letting it play out in industrial relations.
- + Grouping disparate emerging rights frameworks on core areas (work; knowing and understanding content; decision-making) under the comprehensive banner of a right to freedom from automated systems and AI.
- + Inscribing technological resiliency, re-skilling, and skills protection against atrophy, as policy priorities.
- + Setting labelling, watermarking, and informational standards for content to enhance transparency and authenticity.
- + Insisting on human alternatives and op-out mechanisms, especially as regards ADM.
- + Providing meaningful support for communities with lower levels of technological use and/or access. ■

⁴² Stiegler, "Automatic Society," 195.



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