ARTIFICIAL INTELLIGENCE AND DEMOCRACY

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FOREWORD

Artificial Intelligence (AI) is reshaping the rules that govern markets, societies, and political systems, among others. Unsurprisingly, this has spurred an increasing demand for robust standards to guide AI development, ensure a positive impact on humanity, equitable distribution of benefits, and mitigate associated risks and challenges. For this, we need a change in mindset to see past what we think is technology´s unbridled development, particularly in the realm of generative artificial intelligence, and focus instead on its profound impact on our society.

UNESCO has taken the lead in promoting ethical AI governance, especially after the adoption of the Recommendation on the Ethics of Artificial Intelligence by 193 member states in 2021, further reinforced by the implementation of mechanisms to assess countries' capacity to regulate AI effectively. The Recommendation underscores the importance of upholding human rights, dignity, sustainability, and gender equality, while advocating for the fair distribution of AI benefits to promote sustainable development and strengthen democratic systems. With AI initiatives and investments heavily concentrated in specific countries and regions, there is a pressing need for more inclusive systems that embrace cultural and linguistic diversity.

To comprehensively assess AI's impact on our democracies, UNESCO commissioned this analysis to Daniel Innerarity, who, in collaboration with the Chair on Artificial Intelligence and Democracy at the Florence School of Transnational Governance of the European University Institute and the Institute of Democratic Governance of San Sebastian (Globernance), produced this critical report.

This report builds on the Recommendation, focusing on how digitalization reshapes collective decision-making processes and influences citizen interaction. It also explores the potential impact on civil discourse, given the immediacy of social media and the limited space for in-depth exchanges. Recent developments in generative AI have also raised further concerns about disinformation and manipulation, particularly in electoral contexts.

Daniel's study begins with an introduction to the democratic expectations and disappointments associated with digitization before delving into three key aspects: the impact of Big Data on our democracies and its implications for fostering public discourse vital to democracy, the legitimacy and quality of algorithmic decisions, and concludes with a series of recommendations for the democratic governance of artificial intelligence.

Published in a pivotal "super-election" year (2024), during which half of the world's population is preparing to cast their votes, this report arrives at a crit-

ical moment for global politics. This year, as humanity grapples with pressing challenges, including climate change, escalating social dynamics, and the need to safeguard the future, these issues will take center stage at the upcoming Future Summit organized by the United Nations.

It is precisely for these reasons that, through this document, UNESCO urges global stakeholders to engage in meaningful discourse. It advocates for a global and multidisciplinary dialogue as the linchpin to addressing problems of such magnitude, with an unwavering commitment to building a more peaceful, equitable, and inclusive world—ultimately, a more democratic world.

Gabriela Ramos
Assistant Director-General
for the Social and Human Sciences
of UNESCO

RESUMEN EJECUTIVO

UNESCO's *Recommendation on the Ethics of Artificial Intelligence*[1] de la UNESCO, adopted by all Member States in November 2021, is the first global policy framework for artificial intelligence (AI) and outlines different aspects of this technology that directly impact political life. The initial considerations of the Recommendation outline the potential ramifications of AI across diverse domains, notably its implications for democracy. This report builds on these analyses and recommendations, aligning with the core values and principles outlined in the Recommendation. It delves into the current and potential impact of artificial intelligence on democracy and the benefits that both artificial intelligence and digitalization, in general, could bring to enhancing collective decision-making processes.

This analysis is structured around four key topics:

1. The democratic expectations and disappointments of digitization

As an introduction, we delve into the prevailing social demands and expectations regarding the impact of digitization on democracy, drawing from recent discourse among experts and the broader public.

2. The new digital public space: the democratic conversation

Democracy requires a quality social conversation and a public space that embodies certain essential characteristics, without which democracy cannot survive or will be weakened. This report evaluates the qualities necessary for effective dialogue in the digital domain, identifies underlying challenges, and proposes measures to enhance it.

3. The democracy of data: the politics of Big Data

The three elements that will shape policymaking in this century are: increasingly intelligent and automated systems, more integrated and interoperable technology, and a more quantified society. While data is essential for governance, the report critically examines the political and democratic implications of Big Data.

4. Democracy as a form of political decision-making: algorithmic governance

Democracy is a form of **collective decision-making**. The report explores the compatibility of the proliferation of automatic decision-making systems with the regulatory principles of democratic governance. The growth of **algorithmic governance** raises several issues and challenges for democracy, including the identification of tasks suitable for algorithmic solutions without compromising democratic values and the conditions necessary to ensure such compatibility.

Finally, this report offers **recommendations for the democratic governance of artificial intelligence** aimed at mitigating negative impacts and fostering a more democratic approach to AI governance.

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[1]   UNESCO. *Recommendation on the Ethics of Artificial Intelligence* . SHS/BIO/PI/2021/1
      (https://unesdoc.unesco.org/ark:/48223/pf0000381137)

1. INTRODUCTION. EXPECTATIONS AND DISAPPOINTMENTS OF DIGITIZATION IN THE DEMOCRATIC DOMAIN

The development of digital technologies, data, automation, and artificial intelligence has sparked both **great expectations and fear**. Beyond concerns regarding employment, rights, and freedoms, there is also apprehension about their potential impact on political life and democracy.

These technologies are evolving at an unprecedented pace, outstripping regulatory efforts. We are now undergoing a new period of expansion because of generative AI, whose full effects are yet to be seen. Thus, discussions on the implications of artificial intelligence for democracies must remain ongoing and responsive to new technological developments. Any stance on this issue, including the perspectives presented in this document, should be viewed as a fluid contribution, subject to revision in light of technological innovations and citizen demands.

The history of technology is a succession of promises, accomplishments, and disappointments, and digitization is no exception. The advent of the Internet marked a paradigm shift, ushering in a more egalitarian space with reduced mediation. It held the promise of instilling values vital to democracy, such as information accessibility, freedom of expression, the possibility to monitor those who govern us, and the potential for new forms of collective decision-making. Yet, over time, these lofty expectations have been tempered and, at times, shattered due to the emerging challenges that undermine democracy, such as the erosion of public discourse, the rise of new intermediaries, and the opacity of algorithmic decision-making.

This document aims to reflect on how it all unfolds over time while acknowledging that the evolution of technology is largely unpredictable. Rather than viewing this uncertainty as a barrier to action, it should serve as a catalyst for thoughtful consideration and improved regulation[2].

A good example is that generative AI was initially overlooked in the early drafts of the European Artificial Intelligence Act and later became a key topic for discussion during the Act's final drafting stages. Unexpected technological developments will undoubtedly come, forcing us to keep an open and vigilant attitude and be ready to adapt and learn as necessary.

At the turn of the last century, the discussion around the relationship between digitalization and democracy revolved around whether the **Internet's communication expansion would strengthen or weaken democracy**. The Internet is seen as an overpowering force, with society merely a passive recipient of technological progress.

However, this perspective presents a twofold reductionism. Firstly, it presupposes that democracy is a static construct. Secondly, it portrays the Internet's development as linear and deterministic. Yet, democracy is inherently dynamic, and the Internet is an evolving technology. Furthermore, seeing artificial intelligence's inevitable progression can lead to complacency, suggesting that intervention is either

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2   For outstanding perspectives on the possibilities and risks of artificial intelligence, see: Pasquale, Frank (2015), *The Black Box Society: The Secret Algorithms that Control Money and Information*, Cambridge, MA: Harvard University Press; Crawford, Kate (2021), *Atlas of AI*, New Haven: Yale University Press; Nowotny, Helga (2021), *In AI we trust. Power, illusion and control of predictive algorithms*, Cambridge: Polity Press.

unnecessary or impossible. While technological capabilities may shape its trajectory, this evolution will take place within a certain social and political context[3].

Arguably, the only political certainty we have today is that **politics in the future will inevitably be very different from politics in the past**. While it remains unclear whether emerging technologies will enhance or hinder democracy, one undeniable truth is their profound impact on our political landscape, reshaping democratic dynamics as we know them.

Only once we are able to overcome the highs and lows of optimism and disappointment will we be better equipped to make a nuanced assessment of a transformation that is still underway. Nonetheless, the current technological revolution undeniably renders our democracies reliant on forms of communication and information that we do not fully control or understand.

Structurally, these technologies are redefining key aspects of our political system: traditional parliamentary oversight is no longer what it was before X (Twitter), economic financing—facilitated by digitalization—evades the regulatory grasp of States, and the notion of informed citizenship is challenged in an environment saturated with misinformation. While democracy moves slowly and within geographic boundaries, new technologies are quick and boundaryless. We have increasingly more and more technologies at hand that we barely understand, let alone control. Although the full impact of these emerging technologies on political organization remains unclear, we can already see certain ramifications, and these are either the subject of ongoing discussions or the subject of reports on future trends and efforts to govern them effectively[4].

In any case, it is crucial not to lose sight of the **high stakes** involved, particularly concerning democracy and the advancement of artificial intelligence. Do the principles of democratic self-governance still hold relevance and significance in a digital, automated public space largely governed by algorithmic systems? Is this a new era that we must simply accept, or does this historical moment bring new opportunities for democratization?

Digital technologies are ubiquitous and tacit in nature, so they easily escape scrutiny and criticism. If the progress of democracy throughout history has entailed a reflective politicization of various issues—such as tradition, customs, the body, and inequality—today, we are confronted with a set of technologies demanding public reflection and open debate. The obstacles to this lie in our tendency to view technology as an inevitable force or a neutral tool. However, no technology, including this one, is deter-

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3   This oscillation is illustrated by contrasting the following MIT Technology Review headline in early 2013: "Big Data Will Save Politics": https://www.technologyreview.com/magazines/a-more-perfect-union/ and what the same magazine published on its cover just five years later, in the fall of 2018, amidst the Cambridge Analytica scandal, and the proliferation of fake news and hate speech on the Internet: "Technology is threatening our democracy. How do we save it?": https://www.technologyreview.com/magazines/the-politics-issue/

4   These include: House of Lords (2019), Select Committee on Artificial Intelligence, Report of Session 2017–19, HL Paper 100, "AI in the UK: ready, willing and able?"; AI Now Report 2018: https://ainowinstitute.org/publication/ai-now-2018-report-2; European Comission (2018), High-Level Expert Group on Artificial Intelligence, "Draft Ethics Guidelines for Trustworthy AI"; White Paper of the European Commission *On Artificial Intelligence — A European Approach to Excellence and Trust* (2020); Leopoldina, Nationale Akademie der Wisssenschaften (2021), Digitalisierung und Demokratie: https://www.leopoldina.org/publikationen/detailansicht/publication/digitalisierung-und-demokratie-2021/; Bosoer, Lucía / Cantero, Marta / Galariotis, Ioannis / Innerarity, Daniel (2022), "Neither fish nor fowl: the challenges of a democratic AI", STG Policy Briefs, http://hdl.handle.net/1814/75047

ministic or neutral. Neither determinism nor technological neutralism allow us to grasp the full extent of our possibilities and responsibilities in this critical historical moment.[5]

AI technologies are not neutral; they inherently reflect the values of their developers and the broader development and deployment ecosystem. While they have the potential to enhance accountability in public institutions and their representatives, foster greater participation and pluralism to enrich citizen engagement, and make democracy more inclusive and responsive, they can also amplify autocratic tendencies and be used for potentially malicious and manipulative purposes. The swift integration of AI technologies into the digital applications and platforms people often use offers unprecedented opportunities for targeted, individualized, and usually imperceptible influence on individuals and social groups. Thus, some political actors may be tempted to leverage AI for their own advantage.[6]

There is a growing consensus that AI will profoundly shape the future of humanity, and AI is already impacting some of the critical functions of democracy.[7]

When we speak of democracy, we refer to how we structure social coexistence and a governing system crafted throughout history to facilitate the free self-determination of individuals. Notions of representation, participation, legitimacy, and solidarity underscore a humanist vision of societal structure that aspires to make individual rights compatible with communal responsibilities. Genuine democracy only exists where citizens are well-informed, have open channels for participation and advocacy, and have a say in the decisions that affect them. Considering all of the above, while holding considerable promise, current AI technologies also harbor significant risks, several of which this report addresses.

The UNESCO Recommendation on the Ethics of AI explicitly calls for robust national and international regulatory frameworks to ensure the democratic governance of AI and mitigate its potential misuse. This recommendation stresses the need for transparent, accountable, and comprehensible AI ecosystems that safeguard human rights. Ethical AI usage should also consider the role of algorithms in social media platforms and their potential implications for democracy.

The regulatory framework must be shaped by values and principles, demanding increased cooperation between private companies and international organizations. While developers and implementers of AI technologies have predominantly advocated for self-regulation, this approach has proven insufficient to address these challenges and protect human rights, democracy, and the rule of law.

Through the Recommendation, UNESCO adopts a strategic approach to provide the necessary guidance and support, in close cooperation and coordination with relevant institutions and organizations, to create a global policy framework for Artificial Intelligence. This framework is envisioned to encom-

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5   Morozov, Evgeny (2013), *To Save Everything, Click Here: The Folly of Technological Solutionism*, New York: PublicAffairs; Pitt, Joseph (2014), "'Guns don't Kill, People Kill'", in Kroes, Peter / Verbeek (eds.) (2014), The Moral Status of Technical Artefacts, Dordrecht: Springer, 89-102; Winner, Langdon (1985), "Do Artifacts have Politics?", in Wajcman, Judy / MacKenzie, Donald (eds.), *The Social Shaping of Technologie*, Milton Keynes: Open University Press, 26-38.

6   Nadler, Anthony / Crain, Matthew / Donovan, Joan (2018), *Weaponizing the Digital Influence Machine: The Political Perils of Online Ad Tech*, Data & Society Report, (17 October 2018): p. 47. https://datasociety.net/library/weaponizing-the-digital-influence-machine/

7   Parliamentary Assembly, Council of Europe, (4 October 2019) «AI will be a Determining Factor for the Future of Humanity, Committee hearing is told,»: https://pace.coe.int/en/news/7654

pass the entire lifecycle of AI systems, engage all stakeholders, and integrate mechanisms to ensure its effective implementation.[8]

2. THE NEW DIGITAL PUBLIC SPACE: THE DEMOCRATIC CONVERSATION

Democracy hinges on robust conversation and an environment conducive to it. **Digitization is leading to such a radical modification of the public space that it forces us to reevaluate how this dialogue—so essential to democracy—unfolds. We must assess how to enhance it, identify its vulnerabilities, and address potential threats.**

THE OMNIPRESENCE OF DIGITAL SOCIAL MEDIA PLATFORMS AND THE EVOLUTION OF AI HAVE INTRODUCED NEW HURDLES TO INFORMATION INTEGRITY IN ELECTORAL PROCESSES. THESE CHALLENGES INCLUDE THE PROLIFERATION OF DEEPFAKE VIDEOS, THE SURGE IN DIGITAL POLITICAL VIOLENCE AGAINST CANDIDATES, MISINFORMATION CAMPAIGNS THROUGH MICRO-SEGMENTATION TARGETING POTENTIAL VOTERS VIA RECOMMENDATION ALGORITHMS, AND THE USE OF TECHNOLOGY TO EXERT GENDER-BIASED POLITICAL VIOLENCE.[9]

We often fixate on democracy being undermined by interference in electoral processes or by the actions of bots, *yet we overlook* the underlying **structural conditions** that give rise to these phenomena. This results in a low-quality democratic conversation, which manifests as polarization, inadequate participation, and lack of accountability, among other things.

Therefore, the weakness of the public space stems not solely from a deliberate attempt to persuade but also from the very nature of the digital environment itself, which fosters trends that undermine democratic dialogue. The unrestricted space for discussion allows ideas to spread unchecked; the abundance of news and opinions leads to widespread confusion; anonymity on social media fosters irresponsibility in engagement; and accessibility often implies *hackability*.

While intentional distortions certainly exist, much of the poor quality of our public spaces is attributable to the inherent logic shaping the new digital environments and heavily influencing our interaction and communication. Although the Internet was initially hailed as an agent for democratization, it now triggers dynamics that push in the opposite direction, laden with negative connotations concerning its impact on democracy.

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8   Ramos, Gabriela (2022), ETHICS OF AI AND DEMOCRACY: UNESCO RECOMMENDATION'S INSIGHTS, available at: http://turkishpolicy.com/article/1091/ethics-of-ai-and-democracy-unesco-recommendations-insights

9   Open Government Partnership (2024), Six Ways to Protect Democracy against Digital Threats in a Year of Elections. Available at: https://www.opengovpartnership.org/stories/six-ways-to-protect-democracy-against-digital-threats-in-a-year-of-elections/

The proliferation of misinformation, fake news, and hate speech—more easily disseminated in digital settings than analog ones—is particularly concerning due to the harm it causes to the public sphere, which is essential to democracies. Efforts to combat this have led to the development of tools to verify opinions and news aimed at identifying blatant lies to enhance objectivity in collective discourse.

The valuable contributions of fact-checking do not necessarily mean that evidence will prevail, and misrepresentations will no longer be spread in the digital realm (these also existed in analog communication, although different in nature and scale). The efficacy of fact-checking remains limited, partly because public conversation relies less on objectivity and more on people´s subjective interpretations of reality within a pluralistic society.

Today, we are witnessing what we could call the "platformization of democracy," wherein a significant share of conversations are taking place on platforms that, while facilitating them, also shape them in different ways.[10]

Consider, for example, how AI can effectively engage voters individually throughout the electoral process. Chatbots and discussion forums on social media platforms that encourage users to leave comments provide valuable insights into your audience´s temperature. Additionally, AI can collect and analyze this data in real time, allowing campaign strategists to pivot their approaches based on public opinion. However, AI can also be wielded to manipulate voters.

By analyzing voters' unique psychographic and behavioral profiles, AI can be used to sway individuals towards a particular candidate or to spread animosity against their opponents to reinforce the voter´s decision. The creation of psychographic profiles and targeted messaging, facilitated by Big Data, in online digital campaigns based on deceit and intimidation, can influence everything from propaganda to policymaking.[11]

To reflect on the technological infrastructure of democracy, we must now explore why what was once hailed as an open environment without owners turned out to be a restricted space with gatekeepers. While digital giants have successfully positioned themselves as neutral intermediaries, their claim to neutrality is contradicted by their control over access and usage and their influence on content through recommendation algorithms. **If they want to act in line with democratic values, platforms must comply with strict transparency standards by disclosing the inner workings of their algorithms that sort out information, suggest posts, or assess sponsored content.**

This is why several legal frameworks require search engines and social media platforms to regularly disclose technical information about their services, to mitigate the risks of monopolistic abuse (by providing vital information to potential competitors) and the dangers of private censorship on these platforms (by informing users about the algorithms influencing their exposure).

Democracy means people with different opinions can come together to seek common solutions through dialogue. However, AI-driven platforms seem to foster individualistic and polarized attitudes instead of nurturing a shared public space and agenda. They often create homogeneous and self-contained virtual communities sharing the same views, thus undermining social cohesion. AI technologies perpetuate the spread of hate speech, societal compartmentalization, and segmentation. Private companies, driv-

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10   Gillespie, Tarleton (2010), "The politics of 'platforms'", New Media & Society 12(3), 347–364; Srnicek, Nick (2017), *Platform Capitalism*, Cambridge: Polity.

11   Ramos, Gabriela (2022), ETHICS OF AI AND DEMOCRACY: UNESCO RECOMMENDATION'S INSIGHTS, available at: http://turkishpolicy.com/article/1091/ethics-of-ai-and-democracy-unesco-recommendations-insights

en by market rules rather than democratic principles, take no responsibility for enabling the spread of hate speech and violent content.[12]

The challenge is further compounded by the fact that certain segments of the population remain unrepresented on these platforms due to different systemic inequalities (such as gender, age, socioeconomic status, or the very lack of connectivity, leading to disconnection and complete digital exclusion). These disparities must also be considered in this analysis. In essence, there is no democracy without **informed citizens capable of critically monitoring those in power**. The difficulties in fulfilling this role in the analog public domain are now compounded by the complexities of the digital realm, including the opacity of algorithms and the digital divide, which has actually become an exclusion mechanism.[13] In the digital age, democracy demands an understanding of its evolving dynamics and a specialized civic education that fosters specific competencies and skills.

> WHILE THE UNESCO RECOMMENDATIONS IN 2021 STRESSED THE NEED TO PROMOTE EQUITABLE ACCESS TO AI FOR REASONS OF JUSTICE, WE SHOULD ALSO NOTE THAT WITHOUT EQUAL ACCESS, WE WILL NOT HAVE THE ACCOUNTABILITY AND TRANSPARENCY NOR THE CIVIC ENGAGEMENT IN PUBLIC AFFAIRS THAT ARE NEEDED IN A DEMOCRACY.

3. THE DEMOCRACY OF DATA: THE POLITICS OF BIG DATA

To govern, it has always been necessary to **rely on data.** Crises and pandemics remind us once again about the need for data to make informed decisions and predictions. Big Data contributes to the efficiency of public services and strategic planning and influences interactions between citizens, public authorities, politicians, and administrative systems. The United Nations has heralded a "data revolution"[14] expected to foster objective knowledge, leading to more rational and apolitical government actions and public service that does not speculate around assumptions and is not a slave to ideology. **The UNESCO Recommendation underscores the essential values for data governance: quality, reliability, security, privacy, availability, and bias mitigation**[15].

From a democratic standpoint, it is crucial to recognize that the issue of data holds significant political implications and deeply impacts our democracies.

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12   Ramos, Gabriela (2022), ETHICS OF AI AND DEMOCRACY: UNESCO RECOMMENDATION'S INSIGHTS, available at: http://turkishpolicy.com/article/1091/ethics-of-ai-and-democracy-unesco-recommendations-insights

13   Norris, Pippa (2001), *Digital divide: Civic engagement, information poverty, and the Internet worldwide*, Cambridge University Press

14   United Nations (2014), *A World That Counts: Mobilising The Data Revolution for Sustainable Development*: https://www.undatarevolution.org/report/

15   For some of these values see Innerarity, Daniel (2021), *The Data-Driven Pandemic: A New Conceptualization of the Data Society*, STG Resilience Papers; https://cadmus.eui.eu/handle/1814/71696; Véliz, Carissa (2020), *Privacy Is Power. Why and How You Should Take Back Control of Your Data*, London: Bantam Press; Zuboff, Shoshana (2018), *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, New York: Public Affairs.

DATA PROTECTION IS VITAL NOT JUST FOR COMMERCIAL OR HUMAN RIGHTS REASONS BUT ALSO FOR DEMOCRATIC PURPOSES. WHILE DATA PROVIDES OBJECTIVITY AMIDST AN ERA OF IDEOLOGIZED SUBJECTIVISM AND POLARIZATION, IT IS ESSENTIAL TO ACKNOWLEDGE THAT DATA ISN´T NEUTRAL BECAUSE IT CARRIES ALONG ASSESSMENTS, BIASES, AND INEQUALITIES.

Governance based on available data is not neutral or indisputable because the data itself is not neutral or indisputable. We must analyze the new power dynamics that result from the analysis of data. Algorithms issue orders and stabilization processes rooted in power relations, yet they do not exist or operate independently of human intervention. Humans continue to play an important role in political and moral decision-making.[16] The large amounts of data available exceed human capacity to analyze them. Thus, there is an increased reliance on automated algorithms to identify patterns and support decision-making, amplifying our dependence on such technologies and exacerbating power imbalances.

Big Data is as much of a political issue as data production, distribution, and consumption, where access, control, and resources and capabilities are disproportionately distributed due to uneven power dynamics. In the data society, we now even speak of new social classes based on who generates the data, who has the means to collect it, and who has the resources and capabilities to analyze it. The more government, public administration and expert knowledge rely on data control, the more significant the impact on power relations in their various forms. A widening power gap separates those who collect and analyze data from those who merely provide it.

Furthermore, data is not politically neutral; data collection, analysis, and use hinge primarily on specific decisions. The more data-driven policies are, the more crucial it becomes to scrutinize the explicit or hidden assumptions in data selection or the biases they manifest. The nature of the information available dictates the problems governments confront and how they address them. Biases are not solely generated by data but also by algorithm design and AI training practices, which can either amplify or mitigate them.

Data inequality stems primarily from unequal access. Even if databases are publicly available, which most are not, only some have the skills or resources to analyze, manage, or use them. The current big data ecosystem causes significant inequalities, although we now speak of a different kind of poverty and wealth, one that is not based on material possessions. There are essentially three categories of people when it comes to databases: those who generate them, those who have the capabilities and resources to store them, and those who know how to exploit their value, with the latter being the smallest and most privileged group. They dictate the rules governing Big Data use and participation.

Additionally, **algorithms are also a source of inequality**, although they are seemingly limited to recording reputation.[17] Algorithms attempt to decipher society's true essence and preferences based on user behavior. Algorithm designers believe journalists or political representatives should not be the

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16   Mendonça, Ricardo F., Fernando Filgueiras, and Virgílio Almeida, 'Algorithms as Institutions', Algorithmic Institutionalism: The Changing Rules of Social and Political Life (Oxford, 2023).

17   Whittaker, Meredith / Alper, Meryl / Bennett, Cynthia L., / Hendren, Sara / Kaziunas, Liz / Mills, Mara / Morris, Meredith / Rankin, Joy / Rogers, Emily / Salas, Marcel / West, Sarah M. (2019), "Disability Bias, and AI", https://ainowinstitute.org/publication/disabilitybiasai-2019

ones controlling the news or setting the political agenda; they believe that advertising should not be the same for all and that traditional societal categories misrepresent individuals. It proposes a system that evaluates reputation based on users' online activities, liberating it from the influence of authoritative figures. We would be closer to a world without ideological biases, one that is rational and liberated from the subjectivity of its rulers. However, the reality is that such a system also perpetuates existing hierarchies and inequalities within society.

Furthermore, algorithms tend to focus only on a select few, disproportionately valuing those already well-positioned. Not everyone has the same social and cultural resources for all individuals to benefit from platforms for self-promotion. The net favors those who are better equipped, providing them with more opportunities to enhance their social capital and access more resources and opportunities. Moreover, data is inconsistent, and users need to distinguish between data generated by regular people (as we all leave involuntary traces) and that released by institutions seeking to boost their reputation or vie for public attention. The world, as perceived through search engines, often appears meritocratic, granting disproportionate visibility to already well-established web pages or individuals and companies with significant financial resources to invest in search engine optimization, thereby exacerbating existing inequalities. The focus is now on certain types of information, achieving sudden and transient popularity, thanks to coordinated efforts to draw the public's attention to certain products. Viral fame fosters sameness and obsolescence.

Democracy needs well-informed citizens and thrives on diverse perspectives engaging in dialogue to find common ground. However, by dictating the information displayed and consumed, AI technologies used on digital platforms and other channels can facilitate the spread of misinformation and hate speech, creating "echo chambers" that isolate individuals from differing viewpoints, where there is no room for dialogue, thereby stifling critical thinking and corroding democracy. Furthermore, algorithms—driven by commercial interests, among others—reinforce users' existing opinions, preferences, and habits by prioritizing content that aligns with their inclinations, thus reducing users' exposure to divergent viewpoints and limiting their ability to make informed choices freely.[18]

The discourse surrounding data cannot be confined solely to industrial and administrative needs; it must also encompass social and political considerations, including the potential need to stop or reject certain technological applications. We should not be naive to think that having the right information alone will solve all problems without the need for political decisions, judgments, and values.[19]

WE SHOULD NOT BLINDLY ACCEPT THAT DATA ACCURATELY REPRESENT OUR PREFERENCES AND INTERESTS. JUST AS THE MANDATE OF POLITICAL REPRESENTATION IS TO BE CHALLENGED, MONITORED, AND REVOKED, THE CLAIM THAT DATA REPRESENTS WHAT WE REALLY ARE AND WANT WARRANTS REFLECTION ON ITS FULFILLMENT, ITS EPISTEMIC LIMITATIONS, AND UNDERLYING POLITICAL AND ECONOMIC INFLUENCES.

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18   Ramos, Gabriela (2022), ETHICS OF AI AND DEMOCRACY: UNESCO RECOMMENDATION'S INSIGHTS, available at: http://turkishpolicy.com/article/1091/ethics-of-ai-and-democracy-unesco-recommendations-insights

19   Mayer-Schoenberger, Viktor / Cukier, Kenneth (2013), *Big Data: A Revolution That Will Transform How We Live, Work and Think*, London: John Murray.

4. DEMOCRACY AS A FORM OF POLITICAL DECISION-MAKING: ALGORITHMIC GOVERNANCE

To a large extent, **governance is becoming algorithmic** and will be even more so in the future, as automated systems make a significant portion of governmental decisions.[20] It´s hard to think about managing the complexity of modern societies without procedures of this nature, as they process vast amounts of information and automate tasks that would otherwise be impossible or less efficient. **However, the problem is to what extent and how is the algorithmic institutionalism, characterized by the use of Automated Decision Systems (ADS), compatible with what we consider a *political* decision-making system.** Democracy is expected to embody true self-government while the political system effectively addresses societal issues.

Yet, integrating these dual objectives—democracy and efficiency—often creates tension. To address this, we must differentiate between the different political tasks or moments, considering the predominant values in each, and assess the suitability of algorithmic procedures to accomplish these tasks without undermining democratic principles.

Algorithmic governance may make certain aspects more democratic while hindering others,[21] with the availability, timeliness, and quality of data being crucial factors. AI systems can enhance our understanding of social preferences and facilitate more objective assessments of public policies. They are also helpful in situations where there is a large amount of data and the options are sorted into binary categories. However, they prove limited in cases of data scarcity or ambiguous situations, where political decisions are imperative and carry greater certainty than any calculation. **In any case, in a democracy, the ultimate decision lies with the people, who hold sovereignty, regardless of the extent of data processing.**

Contemporary societies need significant knowledge mobilization, enhanced analytical tools, improved technologies, and more efficient administration.

WHILE THE EXTENT TO WHICH ALGORITHMS AND AUTOMATION CAN ENTIRELY REPLACE THE DECISION-MAKING PROCESS IS A MATTER OF DEBATE, EVEN IF THEY COULD, THE CORRECTNESS OF THESE DECISIONS CANNOT BE ESTABLISHED WITHOUT INVOKING A POLITICAL LOGIC, THE LEGITIMACY OF WHICH ULTIMATELY LIES IN FREE POLITICAL WILL.

AI technologies are increasingly used in shared public spaces, including decision-making processes, to achieve efficiency and speed. In recent decades, there has been a trend towards depoliticizing de-

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20   Danaher, John (2016), "The threat of algocracy: Reality, resistance and accommodation", Philosophy & Technology 29, 245-268.

21   Martí, José Luis (2021), "New Technologies at the Service of Deliberative Democracy" in Amato, Guiliano / Barbisan, Benedetta / Pinelli, Cesar (eds.), *Rule of Law vs Majoritarian Democracy*, New York: Bloomsbury, 199-220; Innerarity, Daniel (2023), "The epistemic impossibility of an artificial intelligence take-over of democracy", AI & Society, 2023, https://doi.org/10.1007/s00146-023-01632-1.

cision-making, often relying on quantitative models perceived as highly objective. Technologies have contributed to this.

However, this trend can lead to inactivity among citizens instead of encouraging critical inquiry into the rationale behind decisions. We must also learn that such decisions may stem from interests or values that don´t need to be indisputable, absolute, or "scientific" to be valid. Conditioning society to accept decisions devoid of critical thinking but based solely on authority's dictates is profoundly unjust and consequently detrimental, as it is impossible to definitively ascertain who should be regarded as the authoritative source by public opinion.

AI-assisted technologies can lead people to believe that they make their own decisions when, in fact, they are merely following predetermined patterns. **Moreover, reliance on AI for political decision-making could ultimately lead to an automated form of democracy, diminishing human autonomy over political processes.** The definition of societal objectives should not be left to algorithms but to the people who enjoy democratic legitimacy and assume political and legal responsibilities.[22]

Furthermore, a democracy reliant on these technologies may widen the gap between those with access and technological literacy and those without.

The political constraints of algorithms stem from their **instrumental nature**. While algorithms serve to accomplish predetermined goals, they do little to help establish those objectives, a task reserved for political will, democratic discourse, and deliberation. Policy's role is to determine the framework of algorithmic optimization strategies and to always preserve the flexibility to modify them, particularly in dynamic environments.

IN A DEMOCRACY, EVERY ASPECT SHOULD REMAIN OPEN TO MOMENTS OF RE-POLITICIZATION, THAT IS, TO THE POSSIBILITY OF CHALLENGING ESTABLISHED OBJECTIVES, PRIORITIES, AND METHODS.
THIS IS WHAT POLICYMAKING IS FOR, AND IT IS SOMETHING THAT ALGORITHMS CANNOT DO. *ALGORITHMICALLY OPTIMIZED GOVERNANCE CANNOT APPROPRIATELY ADDRESS POLITICAL CONFLICTS OR THE POLITICAL ASPECTS OF THOSE CONFLICTS—SITUATIONS INVOLVING DISPUTES OVER FRAMEWORKS, GOALS, OR VALUES.*

Algorithmic governance aims to achieve objectives that have yet to be discussed and that the system itself does not define or question. However, democratic politics is much more than mere information processing; it entails interpreting information within a context of pluralism. It is not solely about determining the most efficient means to attain certain objectives but also about deliberating on what those objectives should be. Resolving administrative problems differs greatly from politics, which revolves around the conflict of interpretations regarding realities, where the aim is not to optimize results but to define them.

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22   Ramos, Gabriela (2022), ETHICS OF AI AND DEMOCRACY: UNESCO RECOMMENDATION'S INSIGHTS, available at: http://turkishpolicy.com/article/1091/ethics-of-ai-and-democracy-unesco-recommendations-insights

Algorithmic governance is often mistaken for market logic.[23] While consumption and politics, like the market and democracy, share some similarities and may occasionally intertwine, they retain distinct features that prevent them from being interchangeable. The market caters to consumers' needs, albeit often implicitly formulated. In contrast, politics addresses citizens' demands, which we perceive as more explicit and reflective, although the actual behavior of voters and politicians often contradicts this principle.

Political mandates do not necessarily align with citizens' implicit preferences as consumers. Strictly speaking, politics is not about optimizing results but rather about defining those outcomes through explicit debates on collective aspirations. Democracy is not a service provider, and citizens should not be considered satisfied customers.

Algorithmic governance treats individuals more like **consumers who, at best, validate whether their preferences have been met**, without asking them what type of society they want or granting them a say in shaping society or controlling its trajectory.

People´s will in a democracy transcends individual contentment with such systems since it is not solely about fulfilling needs. To truly understand our societies, we must acknowledge the vast power asymmetries, injustices, and aspirations for change alongside consumer behavior in our analyses. While this approach may fulfill many desires, it often comes at the cost of introspection. Our preferences take precedence over what we genuinely desire, and implicit consumer will replaces explicit political intent.

The paternalism of algorithmic societies lies in satisfying desires, guiding with incentives, and suggesting courses of action. One would think that transferring this model to politics shouldn´t pose too many challenges, except it often demands sacrificing personal freedoms in exchange, especially the freedom to reflect on preferences, subject them to democratic deliberation, and reconsider them if necessary. The most significant transformations in history arose from the possibility of breaking from the past. If our freedom is not open to an indeterminate future, it cannot be the freedom we aim to protect in a democratic society.

Merely leaving decisions to consumers or voters does not necessarily empower free choice, even if we feel that we are making special decisions, as our behaviors often align with ingrained social norms. True freedom entails the aspiration to alter our past selves, leading to somewhat unpredictable situations. And in this respect, algorithms that claim to be predictive are very conservative. They are predictive because they continually assume our future will replicate our past without delving into the complexity of individual and societal subjectivity, including desires and aspirations.

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23   Przeworsky, Adam (1991), *Democracy and the Market. Political and Economic Reforms in Eastern Europe and Latin America*, Cambridge University Press.

5. RECOMMENDATIONS FOR DEMOCRATIC GOVERNANCE OF ARTIFICIAL INTELLIGENCE

Considering the above and acknowledging the role of artificial intelligence in democratic life, the following recommendations are proposed around the different issues discussed in this document:

Education and awareness. Public discourse on artificial intelligence is filled with somewhat exaggerated expectations and unfounded fears, often influenced by private actors or for-profit organizations, such as companies in the sector, some scientists, or the media. Without prejudging the validity of such hypotheses regarding future development and the risks of these technologies, Member States should ensure a **balanced and preventive narrative**, allowing citizens to understand the true implications of technological transformations and feel protected by their authorities.

Regulation and legislation. While **technology governance must respect the logic of technology, especially when it comes to emerging technologies, it must not underestimate our capabilities and responsibilities** in democratic governance.

Moreover, it is important to establish mechanisms for dialogue with national and regional parliaments, mainly through science and technology committees. Parliamentary committees for the future should engage in prospective work to prevent premature obsolescence of AI regulations.

Additionally, technological infrastructures must be examined politically to understand the power dynamics they produce and their impact on democracy. Those hesitant to regulate, especially emerging technologies, often argue that imposing regulations too early could stifle their development. They contend that once a technology becomes widely adopted, its ubiquity serves as evidence that consumers embrace it. Thus, there is no longer any need for further regulation. It is true that our current democratic systems are not in a position to manage digital transformation to any more than a limited extent. Democracies are closely intertwined with the logic of nation-states, and digitization appears to profoundly challenge this traditional structure. **Despite these challenges, inaction is not an option; it should serve as motivation to take that giant leap in political innovation that the new technologies are demanding.**[24]

We need to ensure that the power of AI is regulated and used for the "common good," guided by humanistic principles such as diversity, equality, and inclusion, enshrined in the protection of human rights, democracy, and the rule of law. Contextual assessment should be a multi-stakeholder process involving citizens, governments, civil society, and private companies. The legal framework must establish independent oversight mechanisms for effective compliance to ensure accountability.[25]

However, such an oversight mechanism can only be effective if it is proactive and committed *ex-ante*, meaning before issues arise. Indeed, while introducing penalties for non-compliant behavior is important, relying solely on *ex-post* penalties and fines—which large private companies can usually quickly

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24   Duberry, Jérôme (2022), *Artificial Intelligence and Democracy. Risks and Promises of AI-Mediated Citizen–Government Relation*, Elgar: Cheltenham.

25   PACE - Doc. 14868 (2019) – "Need for Democratic Governance of Artificial Intelligence," accessed on 16 February 2022. http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=27616&lang=en

pay, regardless of the amount—may not achieve the desired results. This is because it is often challenging, if not impossible, to revert to the previous state or "undo the damage" after the introduction and use of a particular AI technology, regardless of its compliance, or lack thereof, with ethical standards, human rights, democracy, and the rule of law.

Additionally, efforts should be made to democratize data. To this end, prioritizing exploratory mechanisms like sandboxes and data lakes can foster public-private collaboration and promote the notion of data as public goods.

Public participation and protection of democracy. Although the public space has expanded beyond the boundaries of nation-states, they still have tools to regulate it in ways that enhance the quality of democratic discourse. Alongside legal measures to prevent or limit the spread of harmful rhetoric, fact-checking institutions have proven effective in mitigating its negative impact. **To ensure maximum transparency, essential for an informed public opinion, States are encouraged to promote codes of best practices for companies and require identifying products generated by artificial intelligence as measures to combat misinformation.** It is not only a matter of passing down the responsibility for self-regulation to stakeholders, but public authorities must also foster responsible behavior in the new digital arena through information, incentives, and regulation.

Data regulation and legislation. It is vital to acknowledge that much of our democratic citizenship hinges on **data regulation, ownership, and use**. Member States should regulate this issue within the scope of their competencies. Given the nature of data, adopting a novel approach to manage it is critical. We should see it as a public good, more in line with the logic of common goods than traditional ownership approaches. Adequate regulation and legislation for developing and using Artificial Intelligence are imperative. This includes safeguards against misuse and promotion for the common good.[26]

Transparency, explainability, and contestability. As the number of decisions that are made, in whole or in part, by automated decision-making systems increases, **democratic principles need corresponding procedures to regard algorithmic decisions as democratic. Encouraging transparency and explainability in artificial intelligence systems is crucial to making it easier to understand decision-making processes and the criteria underlying their outcomes.** The problems of representation, exclusion, or discrimination across politics in general may be exacerbated if decisions are made with artificial intelligence procedures that the people that the people affected can´t understand.

People's sovereignty can manifest as audits of algorithms, ensuring transparency, explainability, and contestability. **In a broader sense, the regulation and governance of AI must be complemented by institutions facilitating public legitimization, which is necessary for this normative principle to be enforced.** These can include civil society organizations that monitor algorithms, company ethics committees, and public agencies tasked with supervising the different phases of the technological cycle, as the case may be.

Inclusiveness. Pluralism must be **guaranteed** throughout the artificial intelligence process, safeguarding gender diversity among professionals, inclusive system design, curated datasets, mitigation of exclusionary biases, facial recognition processes, and information recommendations. These are all crucial. Pluralism should guide the democratization of AI governance, involving new actors such as regions, cities, private entities, and citizens in decision-making processes.

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26 A good example of this is the Code of Ethics of the Provincial Council of Gipuzkoa: https://www.gipuzkoa.eus/documents/20933/6830633/datuak_eta_adimen_artifiziala_kode_etikoa-es.pdf/4e059551-a194-3482-17bc-e24532ff5e05?t=1677148478614

Comprehensive national strategies. Member States should adopt **national digitalization and artificial intelligence strategies with adequate budgets.** These strategies should encompass goals related to technological transformation and economic modernization as well as others with direct democratic implications. These include the digitalization of public administrations and the promotion of digital literacy among citizens, all grounded in democratic values such as equality, inclusion, and accountability.

Multi-stakeholder approach. The democratic principles of equality, accountability, and transparency should serve as the cornerstone of the implementation of the AI system, especially in public service. Member States must ensure **citizen engagement, oversight, and independent assessment** of AI and data protection systems.

Development of global frameworks. Although technology has become a battleground for global leadership and despite the fragmentation of the digital space, Member States must persist in their pursuit of a **shared space and universal standards for digitization and artificial intelligence.** While the nature and dynamics of digital transformation transcend borders, the exact ways in which they interact and affect each region, country, or community may vary. These standards should reflect stakeholders' diverse perspectives, interests, and objectives worldwide, with particular consideration to marginalized regions. The Internet is a global common good and should be governed as such.

In line with this approach, UNESCO´s Recommendation on the Ethics of Artificial Intelligence goes beyond outlining ethical principles and values, also proposing concrete policy measures along with defined tools such as the Readiness Assessment Methodology (RAM) and the Ethical Impact Assessment (EIA). The Recommendation includes specific provisions such as the incorporation of an independent "AI Ethics Officer" role along with other mechanisms for ethical impact assessment, auditing, and continuous monitoring of AI technologies in the public domain. It includes guidelines on the creation of appeal mechanisms for affected parties to seek redress, prioritizing inclusion, gender equality, reliability, environmental protection, and privacy. The Recommendation is intended to serve as a global ethical benchmark, focusing on contextual assessments and equitable governance models. As a leading international standard-setting organization in societal transformation, UNESCO aims to play a pioneering role in designing methodologies and knowledge products to ensure that AI technologies enhance democracy, advancing citizen engagement in democratic processes.

Institutions like UNESCO offer a space for further dialogue to build a digital democracy that the international community and Member States can leverage.

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