RECLAIMING DIGITAL DEMOCRACY: INFORMATIONAL JUSTICE IN THE ALGORITHMIC SHADOW OF INEQUALITY

REIVINDICANDO A DEMOCRACIA DIGITAL: JUSTIÇA INFORMACIONAL NA SOMBRA ALGORÍTMICA DA DESIGUALDADE

Carlo Piparo
University of Seville, Spain
carlopiparo@gmail.com

Received: 05 Jan 2026
Accepted: 10 May 2026
Published: 15 Jun 2026
Corresponding author:
carlopiparo@gmail.com

Abstract

This article explores how artificial intelligence and data-driven platforms are reshaping the conditions of democratic citizenship by producing new forms of digital inequality. Drawing on critical theory, developmental psychology, media studies and constitutional law, the article develops an integrated framework combining Nancy Fraser's theory of participatory justice, García Coll et al.'s ecological model of youth development and Valkenburg et al.'s social compensation theory. Empirically, it engages with survey data on perceived discrimination and youth digital skills, as well as emblematic case studies such as XLAW, Prometea and Cambridge Analytica. Normatively, it situates these developments within a broader project of digital constitutionalism, focusing on informational self-determination, substantive equality and democratic participation. The analysis concludes that addressing digital inequalities requires not only technical and regulatory fixes (GDPR, DSA, AI Act), but also a constitutional re-embedding of AI and platform power within frameworks of transparency, contestability and participatory governance.

Keywords: Execution. Criminal-law. Artificial Intelligence. Re-habilitation. Public Safety.

Resumo

Este artigo analisa como a inteligência artificial e as plataformas orientadas por dados estão a redefinir as condições da cidadania democrática ao produzir novas formas de desigualdade digital. O artigo desenvolve um quadro analítico integrado que combina a teoria da justiça participativa de Nancy Fraser, o modelo ecológico de desenvolvimento juvenil de García Coll et al. e a teoria da compensação social de Valkenburg et al. No plano empírico, recorre a dados de inquéritos sobre discriminação percebida e competências digitais dos jovens, bem como a estudos de caso emblemáticos como o XLAW, o Prometea e o caso Cambridge Analytica. No plano normativo, enquadra estes desenvolvimentos num projeto mais amplo de constitucionalismo digital, com enfoque na autodeterminação informacional, na igualdade substantiva e na participação democrática. A análise conclui que o enfrentamento das desigualdades digitais exige não apenas soluções técnicas e regulatórias (RGPD, DSA, AI Act), mas também uma reconstitucionalização do poder da IA e das plataformas, ancorada em quadros de transparência, contestabilidade e governação participativa.

Palavras-chave: Desigualdade; governança; algorítmica; cidadania; constitucionalismo digital.

Introduction

In contemporary liberal democracies, the rise of artificial intelligence is not merely a technological development; it represents a paradigmatic shift in the distribution of power (PASQUALE, 2015), the configuration of social relations and the operational logics of governance (ZUBOFF, 2019). AI systems increasingly mediate decisions that were once the exclusive prerogative of human deliberation, ranging from public administration and education to criminal justice and healthcare (HELLER, 2022). As these technologies penetrate the social fabric, they do so not in a neutral or uniformly distributed manner but in ways that often reinforce and exacerbate pre-existing structural inequalities (NOBLE, 2018). In this context, digital inequality has emerged as a critical challenge to the core democratic values of equality, autonomy and participation (KUHN, CZERNIEWICZ, DEACON, WALJI, 2023; CELESTE, 2019).

The concept of data inequality extends beyond the traditional "digital divide" associated with disparities in access to infrastructure or devices. It signals a more insidious asymmetry: the unequal ability of individuals and groups to understand, control and benefit from the data flows that increasingly shape public life and personal subjectivity (KUHN, CZERNIEWICZ, DEACON, WALJI, 2023). This structural asymmetry compromises informational self-determination (ROUVROY, 2013), one of the foundational elements of democratic agency, a development that is normatively troubling from a constitutional perspective (FRASER, 2008).

This article examines how AI systems contribute to the reproduction and amplification of digital inequalities and investigates how these dynamics intersect with individual agency, particularly among youth. The guiding research question is: *How does the algorithmic mediation of data contribute to patterns of exclusion that erode democratic citizenship?* To answer this, we analyse the mechanisms through which AI impacts digital competence, social participation and perceived agency, with a specific focus on experiences of discrimination among young people.

The analysis integrates insights from critical theory, developmental psychology, media studies and constitutional law. We adopt a multidimensional framework informed by Nancy Fraser's theory of participatory justice (MASCHERONI, CINO, MIKUŠKA, SMAHEL, 2022; DE CONINCK, VISSENBERG, JORIS, D'HAENENS, 2024), García Coll et al.'s ecological model of youth development (VALKENBURG, PETER, SCHOUTEN, 2006; VAN DIJK, 2020) and Valkenburg et al.'s social compensation theory (HELSPER, VAN DEURSEN, EYNON, VAN DIJK, 2021; MASCHERONI, CINO, MIKUŠKA, SMAHEL, 2022.). Together, these perspectives allow us to conceptualise digital inequality not as a mere deficit of access or skills, but as a recursive product of systemic discrimination, uneven support structures and differential exposure to algorithmic environments.

The ecological model posits that youth development is deeply shaped by contextual factors such as family, peers, institutional settings and broader social dynamics. Perceived discrimination, whether based on ethnicity, religion or socio-economic background, functions as a disruptive force that negatively affects social and cognitive development, including the acquisition of digital skills (DE CONINCK, VISSENBERG, JORIS, D'HAENENS, 2024). Social compensation theory, by contrast, suggests that youth experiencing offline marginalisation may actively seek online environments in order to form new social bonds and assert their presence, thereby developing compensatory digital skills (SEN, 1999; ZUBOFF, 2019). Rather than viewing these theories as mutually exclusive, we argue that they illuminate two dimensions of the same phenomenon: discrimination can both inhibit and stimulate digital engagement, depending on the availability of protective factors such as peer support, family mediation and self-efficacy[1] (CELESTE, 2019).

Our argument is anchored in a substantial empirical base. Drawing on a large-scale survey conducted in six European countries, Italy, Germany, Finland, Estonia, Portugal and Poland, we examine the interplay between perceived discrimination and digital skills among youth aged 11 to 20 (GALETTA, CORVALAN, 2019; MANES, 2020; HU, 2020). The study uses the youth Digital Skills Indicator (yDSI), capturing both functional and critical digital competencies, such as information navigation, communication, content creation and digital knowledge (NOBLE, 2018). The findings reveal that youth who report experiences of discrimination often possess comparatively stronger programming and content-production skills but tend to score lower in communication and interaction, especially when peer support is weak (ANGWIN, LARSON, MATTU, KIRCHNER, 2016).

Structural equation modelling (SEM) indicates that perceived discrimination can correlate with increased internet use and skill acquisition, but only where sufficient peer support exists; without it, the same exposure can lead to overuse, isolation and diminished self-efficacy (EUBANKS, 2018).

The normative implications are significant. In societies premised on equal participation, disparities in digital competence and informational agency translate into disparities in political voice, access to public goods and protection against

[1]EUROPEAN UNION, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data (GDPR), OJ L 119 of 4 May 2016; CHARTER OF FUNDAMENTAL RIGHTS OF THE EUROPEAN UNION, art. 8.

surveillance or manipulation (PIPARO, 2024). If digital environments function as the new *agora*, unequal distribution of skills and knowledge constitutes a form of civic disenfranchisement (O'NEIL, 2016; ZUBOFF, 2019). Institutions, legal, educational, technological, must therefore be re-evaluated to ensure that digital infrastructures do not replicate analogue forms of exclusion, but instead become spaces of inclusion and democratic co-creation.

Methodologically, the article combines theoretical critique with comparative legal analysis and empirical data interpretation. We examine constitutional protections related to informational self-determination in Italy and Spain (KUHN, CZERNIEWICZ, DEACON, WALJI, 2023; CELESTE, 2019), analyse regulatory frameworks such as the EU's General Data Protection Regulation (GDPR), the Digital Services Act (DSA) and the Artificial Intelligence Act (AI Act) (CZERNIEWICZ, 2020), and interpret survey data in light of broader debates on algorithmic governance (HILLERBRAND, 2021; EUBANKS, 2018). Case studies such as XLAW in Italy, Prometea in Argentina and the Cambridge Analytica scandal in the UK illustrate how algorithmic systems can undermine due process, political integrity and individual rights when deployed without sufficient transparency and oversight, from a constitutional perspective (GALETTA, 2019).

Artificial Intelligence and the Production of Inequality

AI technologies rely heavily on prediction: they use past data to forecast future outcomes, infer individual behaviours and guide decision-making in fields as diverse as policing, education, finance and welfare. This predictive logic is frequently presented as neutral, rational and efficient (MANES, 2020). Yet by relying on historical data, AI systems tend to perpetuate the biases embedded in past social decisions, effectively making inequality predictive (O'NEIL, 2016), a dynamic hardly compatible with substantive equality guarantees (EYNO, 2022).

In criminal justice, risk assessment tools trained on datasets that reflect racially biased policing and sentencing practices are more likely to flag individuals from historically marginalised groups as "high risk", not because of intrinsic factors, but because those groups are over-represented in punitive law-enforcement data (HU, 2020; ZUBOFF, 2019). Similar dynamics can be observed in welfare and social policy (VOIGT, VON DEM BUSSCHE, 2017): fraud-detection tools and automated eligibility systems often target already vulnerable populations, embedding structural discrimination into supposedly objective algorithms[2].

The notion of "algorithmic rationality" captures these mechanisms.

Algorithmic rationality replaces human judgment with data-driven calculation: it prioritises efficiency and predictability over contextual nuance, ethical reflection and social complexity (SEN, 1999). It transforms multifaceted social problems into discrete computational tasks. In doing so, it obscures the histories of injustice that shape the underlying data. The result is not only the mirroring of existing inequalities, but their operationalisation as risk scores, eligibility thresholds or behavioural profiles (CRAMER, 2015).

At this point, a clarification is necessary. Data are central to AI, and the ways in which they are collected, categorised and interpreted fundamentally shape how AI systems operate. The concepts of *invisibility* and *hyper-visibility* help explain the dual mechanisms through which inequality is digitally reproduced. Invisibility refers to the systematic absence or under-representation of certain groups in datasets (CRUICKSHANK, 2021), while hyper-visibility (DE CONINCK, VISSENBERG, JORIS, D'HAENENS, 2024) refers to the excessive surveillance or targeting of marginalised communities (KUHN, 2023).

Invisibility often results from socio-technical biases in data collection: groups with limited digital access or literacy, or living in under-surveyed environments, are more likely to be left out of official datasets altogether (PIPARO, 2024; PIPARO, 2023). When such individuals are absent from training data, AI models fail to recognise or respond adequately to their needs. Conversely, predictive policing systems and welfare-surveillance tools tend to concentrate data collection in low-income areas and racialised communities, creating cycles of hyper-visibility in which poverty and racial difference are pathologised (NOBLE, 2018; DE CONINCK, VISSENBERG, JORIS, D'HAENENS, 2024).

These dynamics reflect broader patterns of social, cultural and economic capital (PASQUALE, 2015). Those with greater resources are better positioned to be represented accurately, and advantageously, in digital systems, while marginalised communities are rendered either invisible (when their experiences do not register as "data") or over-exposed to coercive forms of datafication (VAN DIJCK, POELL, DE WAAL, 2018). Without participatory approaches to data governance, AI will continue to reflect the priorities of those in power and marginalise others (BIETTI, 2020).

The abstract concerns outlined above are vividly illustrated by three em-

[2]EUROPEAN COMMISSION, Ethics Guidelines for Trustworthy AI, 2019; EUBANKS, V., Automating inequality, cit.

blematic cases: Prometea in Argentina, XLAW in Italy and Cambridge Analytica's operations in the UK and US.

Prometea, developed by the Public Prosecutor's Office in Buenos Aires, is an AI system that automates routine judicial tasks by analysing large volumes of legal texts and drafting documents in minutes (ZUIDERVEEN BORGESIUS, 2018; ZUBOFF, 2019). While it significantly reduces processing times, Prometea raises questions about transparency, legal representation and the risk of automating legal reasoning in ways that may exacerbate inequality for citizens with limited legal literacy (VOIGT, VON DEM BUSSCHE, 2017).

XLAW, Italy's first predictive-policing software, uses historical crime data to forecast where and when offences are likely to occur, guiding patrols accordingly (FLORIDI, COWLS, KING, TADDEO, 2018). In practice, it tends to focus law-enforcement resources on already over-policed neighbourhoods, generating feedback loops in which police presence produces more records, which in turn shape future predictions.

Cambridge Analytica, finally, represents a paradigmatic case of algorithmic manipulation in electoral contexts. By harvesting data from millions of Facebook users and constructing psychographic profiles, the firm micro-targeted political advertisements during the 2016 US elections and the Brexit referendum (CELESTE, 2019; ZUBOFF, 2019). The scandal highlighted how AI-driven profiling can exploit personal vulnerabilities, distort public debate and undermine democratic integrity.

Across these examples, AI does not operate in a vacuum: it functions within institutional structures that determine whose interests it serves and whose lives it shapes.[3]

Individual Agency in the Digital Sphere

The ubiquity of digital technologies has brought the concept of individual agency into sharp focus. Central to this is the right to *informational self-determination*, deeply tied to democratic freedoms and constitutional safeguards. In the digital realm, the capacity of individuals to control their personal data, determine how it is processed and make autonomous decisions about their online presence is increasingly a prerequisite for meaningful participation in society.

In Italy, the Constitutional Court has interpreted Article 21 of the Con-

[3]EUROPEAN COMMISSION, Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), COM(2021) 206 final, Brussels, 21 April 2021.

stitution, on freedom of expression, as encompassing a broader right to be informed and to inform others, forming a constitutional bedrock[4] for informational self-determination. Similarly, Article 20 of the Spanish Constitution, read in conjunction with Article 9(2), requires public authorities to promote real and effective equality and remove barriers that impede full participation in public life, including in the digital domain.

At the European level, the GDPR and Article 8 of the EU Charter of Fundamental Rights codify personal-data protection as a fundamental right, granting individuals powers to access, rectify and erase data, and to object to automated decision-making. However, as many scholars note, these legal safeguards are often undermined in practice by asymmetries of knowledge, bargaining power and technical capacity between users and data controllers (VOIGT, VON DEM BUSSCHE, 2017).

The emphasis on agency in legal theory resonates with the capability approach of Sen and Nussbaum, according to which justice requires not only formal rights but effective capabilities to pursue valued ways of life (MANTELERO, 2018). Informational self-determination, in this light, is both a means and an end: it enables participation in political, economic and cultural life, while also serving as a marker of dignity and respect. Yet opaque terms of service, coercive consent mechanisms and inscrutable algorithmic processes risk reducing this right to a paper guarantee (LYON, 2001) unless accompanied by meaningful digital literacy, inclusive design and robust enforcement (ANANNY, CRAWFORD, 2018).

In the "post-digital" condition, human-digital interactions are so deeply intertwined that distinguishing agency from automation becomes increasingly difficult (CRAMER, 2015). Algorithmic systems now act not only as information intermediaries but also as *affective agents* (ZUBOFF, 2019), entities designed to detect, interpret and respond to human emotions. Emotional manipulation facilitated by AI-driven profiling constitutes what some authors call *affective injustice* (ZUBOFF, 2019), where individuals' emotional expressions are exploited, particularly in contexts of marginalisation (CREAN, 2021; SRINIVASAN, 2018).

Recommended systems (ZUBOFF, 2019) predict which content will maximise engagement; chatbots simulate empathy to increase conversion rates; behavioural analytics track affective states to optimise advertising or political messaging. This is particularly evident in emotionally targeted recommendation systems. Profiling technologies infer traits, beliefs and preferences without explicit disclosure or

[4]BVerfG, Census Act Case, 15 December 1983 (Volkszählungsurteil); SIMITIS, S., "Reviewing privacy in an information society", *University of Pennsylvania Law Review*, 1987.

consent, using these inferences to tailor experiences, shape choices and nudge behaviours, often in ways that remain invisible to users. This undermines core democratic values of deliberation, transparency and informed consent.

In political communication, personalised campaign bots and micro-targeted messaging blur the line between persuasion and manipulation, exploiting cognitive biases and reinforcing confirmation loops (DE CONINCK, VISSENBERG, JORIS, D'HAENENS, 2024). Political participation risks becoming a performance orchestrated by algorithmic systems rather than an expression of autonomous judgment. The erosion of agency is particularly acute for marginalised youth, who often rely more heavily on digital platforms and peer networks due to offline exclusion (TUFEKCI, 2015; GILLESPIE, 2018).

Disinformation in the digital age is not merely a matter of isolated falsehoods, but a systemic disruption of trust, authority and epistemic order. The rise of fake news and deepfakes signals a new phase in the transformation of political life, in which traditional intermediaries, journalists, institutions, civil-society organisations are circumvented and citizens are directly targeted with manipulated content tailored to their profiles.

Deepfakes, in particular, compromise the basic conditions of communicative democracy by enabling the fabrication of political speech, delegitimising evidence and fostering epistemic relativism (VAN DIJK, 2020; ZUBOFF, 2019). When voters cannot trust what they see or hear, the basis for democratic accountability collapses. The Italian and Spanish constitutions enshrine the right to receive and impart information; these guarantees presuppose an informational environment in which truth claims can be meaningfully assessed. In an ecosystem dominated by engagement-optimised algorithms, this assumption is increasingly fragile.

Digital disintermediation also fragments the public sphere into algorithmically curated realities, as empirical observation of contemporary platforms shows. Citizens are no longer exposed to a common body of facts, but to personalised narratives that reinforce existing beliefs and identities (ZUÍDERVEEN BORGESIUS, 2018). The digital divide today thus includes not only access and skills, but also informational quality and interpretive capacity, a divide widened by opaque ranking systems, platform incentives and the commodification of attention.[5]

[5]DIGITAL SERVICES ACT, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022, OJ L 277, 27 October 2022.

Algorithmic Governance and the Democratic Principle

The integration of algorithmic systems into decision-making structures has reshaped the normative framework of democratic governance. Article 3(2) of the Italian Constitution mandates that the Republic remove social and economic obstacles that prevent the full development of the person and effective participation (FERRAJOLI, 2007). in political, economic and social life; Article 9(2) of the Spanish Constitution similarly obliges public authorities to promote real and effective equality. These principles are increasingly strained by algorithmic governance mechanisms that embed pre-existing inequalities and generate new forms of digital exclusion.

Automated systems used in policing, credit scoring, recruitment and welfare assessments operate on historical datasets that disproportionately reflect the behaviours of already marginalised communities. Search engines and recommendation systems encode racial and gender biases, reinforcing the »default settings» of inequality under the guise of neutrality (POHLE, THIEL, 2020). Algorithmic opacity makes discriminatory outcomes difficult to identify, a development that is hardly compatible with constitutional guarantees (PASQUALE, 2015).

The feedback loops generated by biased data are particularly pernicious: models trained on unequal outcomes reproduce those outcomes in subsequent iterations, entrenching cycles of over-policing, under-protection and exclusion (ANGWIN, LARSON, MATTU, KIRCHNER, 2016). This fragmentation undermines the conditions of a shared public sphere, as empirical observation of contemporary platforms clearly shows. This tension remains largely unresolved in current regulatory and institutional responses. This tension remains largely unresolved.

This shift deserves careful attention, not only technically but constitutionally. Increasingly, functions once performed by state actors, from information curation to norm enforcement, are managed by private platforms through algorithmic systems (VAN DIJCK, POELL, DE WAAL, 2018). Companies like Meta, Google and TikTok moderate vast portions of public discourse, determine visibility and arbitrate compliance with both legal and extra-legal norms, yet their decision-making processes are proprietary, their appeals mechanisms limited and their obligations to democratic norms weak or inconsistently applied (GILLESPIE, 2018).

This development creates what some scholars describe as a »constitutional vacuum», where power is exercised without the traditional checks and balances associated with public institutions (BALKIN, 2014). Self-regulatory mechanisms such as transparency reports or oversight boards often lack independence and enforcement capacity. Global jurisdictional fragmentation further allows platforms to play off different regulatory regimes against one another, exacerbating democratic deficits (VAN DIJCK, POELL, DE WAAL, 2018; COHEN, 2019).

For individuals affected by automated decisions, from de-platforming to denial of benefits, avenues for redress are often opaque or non-existent, raising serious due-process concerns (CITRON, PASQUALE, 2014; PASQUALE, 2015). To restore democratic control, policymakers must impose enforceable obligations on platform operators, including algorithmic transparency, explainability and forms of participatory governance. The DSA and AI Act represent initial steps in this direction, but their scope and enforcement mechanisms will need to be strengthened.

Digital platforms cannot be understood solely as market actors. Their control over communication, commerce and data infrastructures renders them hybrid political entities exercising what has been called »infrastructural power» (BIETTI, 2020; VAN DIJK, 2020). During the COVID-19 pandemic and recent electoral cycles, platforms effectively acted as arbiters of truth, deciding which public-health guidance or political claims were allowed to circulate, often without clear, consistent or democratically legitimised standards (KAYE, 2018).

Algorithmic amplification based on engagement rather than epistemic value contributes to the spread of misinformation, polarisation and echo chambers (SUNSTEIN, 2017), undermining the integrity of public discourse (TUFEKCI, 2015). Micro-targeted political advertising fragments the public sphere and circumvents collective deliberation, creating asymmetries of information and influence that distort representation (ZUIDERVEEN BORGESIUS, 2018; HU, 2020). Recognising platforms as hybrid political actors implies subjecting them to public-law principles: legality, transparency, proportionality, and instituting mechanisms for user participation in governance (POHLE, THIEL, 2020; DE GREGORIO, DUNN, 2023).

Toward Informational Justice and Digital Equality

European institutions have responded to the challenges posed by algorithmic governance with a set of legal instruments aimed at restoring control, transparency and justice in digital systems. The GDPR introduced principles such as purpose limitation, data minimisation and informed consent, and codified rights of access, rectification and erasure, as well as a limited right not to be subject to certain automated decisions (MANTELERO, 2018). The DSA imposes transparency and risk-assessment obligations on very large online platforms, including duties concerning recommendation systems and content moderation. The proposed AI Act adopts a risk-based approach, setting stringent requirements for high-risk AI systems and prohibiting applications such as social scoring and certain manipulative practices.

These regimes, however, remain fragmented, and their effectiveness will depend on enforcement, institutional capacity and their integration into a broader constitutional framework. “he resulting regulatory balance is normatively troubling.

A just digital society must be grounded in the autonomy of its citizens, which requires not only access to technology but the ability to understand, question and shape the systems that govern informational life. Informational autonomy thus demands *explicability*, *transparency* and an enforceable *right to explanation* or justification.

Explicability involves intelligibility, grasping how a system works, and accountability, knowing who is responsible for its design and deployment (FLORIDI, COWLS, KING, TADDEO, 2018). Transparency alone, understood as mere disclosure of technical details, is insufficient; it must be relational and contextual, enabling affected parties to meaningfully engage with algorithmic operations (ANANNY, CRAWFORD, 2018). While Article 22 GDPR provides for “meaningful information about the logic involved” in automated decision-making, the scope of this protection is contested. Scholars have argued for a broader right to justification (ALEXY, 2002), requiring reasons that are intelligible, contestable and normatively acceptable (WACHTER, MITTELSTADT, FLORIDI, 2017; HILDEBRANDT, 2018).

Reinforcing informational autonomy will require multi-level measures: binding duties of explainability for high-risk systems, enforceable individual rights, institutional oversight bodies (such as public algorithm registers and independent review panels) and participatory mechanisms that allow users and civil-society actors to co-determine the design and evaluation of algorithmic systems (KROLL, 2017; PASQUALE, 2015).

The cumulative effect of these regulatory and normative developments suggests a nascent paradigm of *digital constitutionalism*, which seeks to extend constitutional principles, dignity, autonomy, equality, participation, into the digital sphere, where private infrastructures increasingly mediate public life (CELESTE, 2019). This distinction matters, legally and politically, as digital constitutionalism rests on three pillars: (1) fundamental rights must apply regardless of whether power is exercised by public or private actors; (2) digital systems must be designed and governed in accordance with the rule of law and democratic accountability; and (3) structural safeguards against concentration of power must be promoted.

Precedents such as the German Federal Constitutional Court's jurisprudence on informational self-determination and the Italian Constitutional Court's extension of Article 21 to digital freedoms provide a doctrinal foundation for this project. Yet digital constitutionalism must go beyond rights formalism to address the underlying political economy of data extraction, platform monopolies and infrastructural dependency (ZUBOFF, 2019).

The challenge is fundamentally democratic: ensuring that the »code by which we live» is compatible with the »values by which we govern (LESSIG, 1999). This requires embedding constitutional principles not only in legal texts, but in the architecture of digital systems themselves.

This article has argued that digital inequality today is best understood as a problem of *informational justice*. AI systems and platform infrastructures do not simply reflect social inequalities; they help produce and stabilise them by making disadvantage predictive, by rendering some groups invisible and others hyper-visible, and by reallocating decision-making power to opaque, privately controlled and automated structures.

Reclaiming digital democracy requires more than incremental regulation or technical fixes. It demands a constitutional re-orientation of digital governance towards substantive equality, informational self-determination and participatory control over algorithmic systems. Only by foregrounding justice and equality, and by centring the lived experiences of those most affected, particularly youth, can we ensure that the digital future strengthens, rather than undermines, the democratic project.

References

ALEXY, R. *A theory of constitutional rights.* Oxford: Oxford University Press, 2002.

ANANNY, M.; CRAWFORD, K. Seeing without knowing: Limitations of the transparency ideal and its application to algorithmic accountability. *New Media & Society*, v. 20, p. 973–989, 2018.

ANGWIN, J.; LARSON, J.; MATTU, S.; KIRCHNER, L. Machine bias: There's software used across the country to predict future criminals. And it's biased against blacks. *ProPublica*, 2016.

BALKIN, J. M. Old-school/new-school speech regulation. *Harvard Law Review*, v. 127, p. 1190–1210, 2014.

BENJAMIN, R. *Race after technology: Abolitionist tools for the New Jim Code.* Cambridge: Polity Press, 2019.

BIETTI, E. From ethics washing to ethics bashing: A view on tech ethics from within moral philosophy. *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, p. 29–41, 2020.

BODIN, J. Artificial intelligence and democratic legitimacy. *AI & Society*, v. 36, p. 1–12, 2021.

BRADFORD, A. *The Brussels effect: How the European Union rules the world.* Oxford: Oxford University Press, 2020.

CELESTE, E. Digital constitutionalism: A new systematic theorisation. *International Review of Law, Computers & Technology*, v. 33, p. 76–99, 2019.

CHARTER OF FUNDAMENTAL RIGHTS OF THE EUROPEAN UNION. Art. 8.

CHESNEY, R.; CITRON, D. Deep fakes. *California Law Review*, v. 107, p. 1753–1819, 2019.

CITRON, D. K.; PASQUALE, F. The scored society: Due process for automated predictions. *Washington Law Review*, v. 89, p. 1–33, 2014.

COHEN, J. E. *Between truth and power: The legal constructions of informational capitalism.* Oxford: Oxford University Press, 2019.

CRAMER, F. What is 'post-digital'? *APRJA*, v. 3, 2015.

CREAN, M. Affective injustice and the politics of empathy. *Critical Horizons*, v. 22, p. 1–17, 2021.

CRUICKSHANK, J. Data gaps and social exclusion. *Big Data & Society*, 2021.

CZERNIEWICZ, L. Inequality as higher education goes online. *Postdigital*

Science and Education, v. 5, p. 1–15, 2023.

DE CONINCK, D.; VISSENBERG, J.; JORIS, W.; D'HAENENS, L. Perceived ethnic discrimination and digital inequalities among children and young people: Studying the multidimensional concepts of digital skills and digital knowledge. *Information, Communication & Society*, v. 27, p. 350–370, 2024.

DE GREGORIO, G. Constitutional governance of online platforms. *Common Market Law Review*, v. 58, p. 485–512, 2021.

DE GREGORIO, G.; DUNN, P. The Digital Services Act and systemic risks. *Common Market Law Review*, v. 60, p. 1027–1056, 2023.

EUROPEAN COMMISSION. *Ethics Guidelines for Trustworthy AI.* Brussels, 2019.

EUROPEAN COMMISSION. Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act). COM(2021) 206 final, Brussels, 21 April 2021.

EUROPEAN UNION. Regulation (EU) 2016/679 (General Data Protection Regulation). OJ L 119, 4 May 2016.

EUROPEAN UNION. Regulation (EU) 2022/2065 (Digital Services Act). OJ L 277, 27 October 2022.

EUBANKS, V. *Automating inequality: How high-tech tools profile, police, and punish the poor.* New York: St. Martin's Press, 2018.

EYNO N, R. AI and datafication of inequality. *Learning, Media and Technology*, v. 47, p. 1–14, 2022.

FERRAJOLI, L. *Principia iuris.* Vol. II. Rome–Bari: Laterza, 2007.

FLORIDI, L.; COWLS, J.; KING, T. C.; TADDEO, M. How to design AI for social good: Seven essential factors. *Science and Engineering Ethics*, v. 24, p. 689–709, 2018.

FRASER, N. Reframing justice in a globalizing world. In: FRASER, N. *Scales of justice.* New York: Columbia University Press, 2008.

GALETTA, D. U.; CORVALAN, J. G. Algorithmic decision-making in the public sector: Transparency and accountability. *Revista General de Derecho Administrativo*, v. 50, 2019.

GARCÍA COLL, C. et al. An integrative model for the study of developmental competencies in minority children. *Child Development*, v. 67, p. 1891–1914, 1996.

GILLESPIE, T. *Custodians of the Internet.* New Haven: Yale University Press, 2018.

HELLER, N. Is artificial intelligence compatible with democratic government? *The New Yorker*, 2022.

HILDEBRANDT, M. Law as computation in the algorithmic state. *University of Toronto Law Journal*, v. 68 (Suppl. 1), p. 1–27, 2018.

KROLL, J. A. et al. Accountable algorithms. *University of Pennsylvania Law Review*, v. 165, p. 633–705, 2017.

KUHN, S. D.; CZERNIEWICZ, L.; DEACON, A.; WALJI, S. Understanding digital inequality: A theoretical kaleidoscope. *Postdigital Science and Education*, v. 5, 2023.

LESSIG, L. *Code and other laws of cyberspace.* New York: Basic Books, 1999.

LYON, D. *Surveillance society.* Maidenhead: Open University Press, 2001.

MANES, V. Predictive policing e principio di eguaglianza. *Questione Giustizia*, v. 2, 2020.

MASCHERONI, G.; CINO, D.; MIKUŠKA, J.; SMAHEL, D. Explaining inequalities in vulnerable children's digital skills. *New Media & Society*, v. 24, 2022.

NOBLE, S. U. *Algorithms of oppression.* New York: New York University Press, 2018.

NUSSBAUM, M. C. *Creating capabilities.* Cambridge (MA): Harvard University Press, 2011.

O'NEIL, C. *Weapons of math destruction.* New York: Crown, 2016.

PASQUALE, F. *The black box society.* Cambridge (MA): Harvard University Press, 2015.

PIPARO, C., Criminal liability models and criminal participation in the digital environment: a modern challenge in the perspective of Italian constitutionalism. **Collected Papers of the Faculty of Law**, Novi Sad, p. 1357-1378, 2023.

PIPARO, C., BLAZEK, R. Criminal algorithms and their punishment in modern constitutionalism, **Bratislava Law Review**, Bratislava, p. 200-222, 2024.

PIPARO, C. La controvertida relación entre la inteligencia artificial y la democracia representativa. **Nuovi autoritarismi e democrazie**, 6, 1, Milano, 2024.

PIPARO, C. Machina delinquere potest? (ph.D. thesis). **University of Udine:** Udine, p. 1-180, 2025.

POHLE, J.; THIEL, T. Digital sovereignty. *Internet Policy Review*, v. 9, 2020.

ROUVROY, A.; BERNS, T. Algorithmic governmentality and prospects of emancipation. *Réseaux*, v. 177, 2013.

SEN, A. *Development as freedom.* Oxford: Oxford University Press, 1999.

SUNSTEIN, C. R. *#Republic.* Princeton: Princeton University Press, 2017.

TEUBNER, G. *Constitutional fragments.* Frankfurt: Global Law Press, 2012.

TUFEKCI, Z. Algorithmic harms beyond Facebook and Google. *Colorado Technology Law Journal*, v. 13, p. 203–218, 2015.

VAN DIJCK, J.; POELL, T.; DE WAAL, M. *The platform society.* Oxford: Oxford University Press, 2018.

VALKENBURG, P. M.; PETER, J.; SCHOUTEN, A. P. Friend networking sites and adolescents' well-being. *CyberPsychology & Behavior*, v. 9, 2006.

ZUBOFF, S. *The age of surveillance capitalism.* London: Profile Books, 2019.

Acknowledgements and Conflicts of Interest

The author declares that there are no conflicts of interest with respect to the research, authorship, and publication of this article.