Yale Journal of Law & Technology
Volume 28, Issue 1

Sovereignty in the Technological Singularity

Zachary L. Catanzaro[*]

Democratic governance assumes that political authority expires with those who hold it. Every earlier mechanism for governing after death, from wills to constitutions, depended on a living interpreter who could revise what the dead left behind. This Article argues that algorithmic systems eliminate that interpreter. They encode their designers' preferences into infrastructure that persists after the designers are gone and that resists democratic revision. I call this political condition algorithmic necrocracy. Foucault's biopower and Mbembe's necropolitics both presuppose a living administrator; neither accounts for governance whose author is absent. Because these systems absorb external regulation as one more variable to optimize, the Article looks to institutions that have historically resisted capture (the jury, the sunset clause, the citizens' assembly) and proposes constitutional protections that keep certain decisions in human hands.

---

[*]Assistant Professor of Law, Widener Delaware School of Law. Thanks to James Grimmelmann and Ben Sobel for their feedback at the 2025 Internet Law WIP Conference at Santa Clara School of Law; Mark Lemley and Ira Nathenson for their continued support; Scarlet Riviere and my research assistants Madison Allwine, John Grossbauer IV, Jessica Mion, Valentina Montoya Bayona, and Ian J. Kolb for their valued contributions.

Article Contents

I. Introduction 619
II. The Sovereignty of Death 627
  A. The Political Death 628
  B. The Social Death 630
  C. The Spiritual Death 635
  D. The Temporal Death 638
  E. Rejecting the Dead Hand 642
  F. Rejecting Death 643
III. Toward the Algorithmic Death-World 647
  A. Biopolitical Sovereignty 648
  B. Necropolitical Sovereignty 652
  C. Algorithmic Death-Worlds 659
  D. Algorithmic Persistence 663
  E. Algorithmic Temporality 665
IV. Sovereignty in the Singularity 673
  A. The Residual Commons 675
  B. The Living Claim 681
  C. The Last Interpreter 683
  D. Form Without Force 684
V. Conclusion 688

Everyone finds themselves alone before death, since death is a general equivalence. — Jean Baudrillard[1]

I. Introduction

Death is inexorable, the general equivalence which dissolves all political boundaries.[2] The Constitution's architects understood that mortality was already programmed into every human sovereign who would ever govern under it.[3] Elections, term limits, and generational revision through amendments serve as mortality's proxies, legal translations of the one temporal constraint no ruler escapes. The sovereign claims the right to decide life and death, yet remains unable to overcome it.[4] The Constitution was accordingly engineered to instrumentalize death's disruption of power to democratic use.

Yet Silicon Valley has declared war on death's political finality.[5] Their declared goal is the singularity: the threshold

---

[1] *See* JEAN BAUDRILLARD, SYMBOLIC EXCHANGE AND DEATH 146 (Iain Grant trans., rev. ed. 2017).

[2] *See* MICHEL FOUCAULT, THE HISTORY OF SEXUALITY 138 (Robert Hurley trans., 1978) ("In the passage from this world to the other, death was the manner in which a terrestrial sovereignty was relieved by another, singularly more powerful sovereignty.").

[3] *See* AKHIL REED AMAR, AMERICA'S CONSTITUTION: A BIOGRAPHY 7–10, 277–310 (2005) (reading the amendment process, electoral architecture, and term structure as institutionalizations of generational popular sovereignty: the Constitution's structural mechanisms translate mortality's universal constraint into positive law, preventing any single generation's preferences from binding those that follow without their consent); *see also* BRUCE ACKERMAN, WE THE PEOPLE: FOUNDATIONS 3–33 (1991) (theorizing constitutional moments as periods of popular mobilization that reset inherited constitutional arrangements).

[4] *See* FOUCAULT, HISTORY OF SEXUALITY, *supra* note 2, at 135 ("For a long time, one of the characteristic privileges of sovereign power was the right to decide life and death."); *see also* MAX WEBER, ECONOMY AND SOCIETY 54 (Guenther Roth & Claus Wittich eds., Ephraim Fischoff et al. trans., Univ. of Cal. Press 1978) (1922) ("A compulsory political organization with continuous operations will be called a 'state' . . . insofar as its administrative staff successfully upholds a claim to the monopoly of the legitimate use of physical force.").

[5] *See* RAY KURZWEIL, THE SINGULARITY IS NEAR: WHEN HUMANS TRANSCEND BIOLOGY 9 (2005) ("The Singularity will allow us to transcend

where artificial intelligence supersedes human cognition and biological death loses its political meaning.[6] Where previous sovereigns sought immortality through divine right, dynastic succession, or institutional permanence, Silicon Valley's technocrats pursue it as an engineering project, converting machine intelligence and the behavioral data of governed populations into the infrastructure of permanent and terminal rule.[7]

The singularity is thus a secular eschatology[8] that has colonized American AI governance discourse.[9] Its political program is found within the "Dark Enlightenment" movement, a neoreactionary accelerationist ideology that rejects democratic governance as a systems failure.[10] This movement advocates exit from the neoliberal democratic world order and calls openly for the adoption of neocameralism, a form of authoritarian corporate dictatorship.[11] According to Nick Land, automation has

---

the . . . limitations of our biological bodies and brains.").

[6] *Id.*

[7] *See* Sigal Samuel, *Silicon Valley's Vision for AI? It's Religion, Repackaged*, VOX (Sept. 7, 2023), https://www.vox.com/the-highlight/23779413/silicon-valleys-ai-religion-transhumanism-longtermism-ea [https://perma.cc/RX6X-C2XP].

[8] *See Eschatology*, MERRIAM-WEBSTER, https://www.merriam-webster.com/dictionary/eschatology [https://perma.cc/8RVE-K4X4] (defining eschatology as "(1) a branch of theology concerned with the final events in the history of the world or of humankind; or (2) a belief concerning death, the end of the world, or the ultimate destiny of humankind").

[9] *See generally* ROBERT GERACI, APOCALYPTIC AI: VISIONS OF HEAVEN IN ROBOTICS, ARTIFICIAL INTELLIGENCE, AND VIRTUAL REALITY 3–28 (2010) (analyzing the singularity as a formally eschatological narrative structure); Tobias Huber, *The Singularity Has Already Happened*, FIRST THINGS (Mar. 24, 2025), https://firstthings.com/the-singularity-has-already-happened [https://perma.cc/H27L-B3CM].

[10] *See* Kyle Chayka, *Techno-Fascism Comes to America*, NEW YORKER (Feb. 26, 2025); *see also* JAMES DALE DAVIDSON & WILLIAM REES-MOGG, THE SOVEREIGN INDIVIDUAL: MASTERING THE TRANSITION TO THE INFORMATION AGE (2020) (foreword by Peter Thiel); Nick Land, *Meltdown*, *in* FANGED NOUMENA: COLLECTED WRITINGS 1987-2007, at 441 (Robin Mackay & Ray Brassier eds., 2011).

[11] *See* ACHILLE MBEMBE, NECROPOLITICS 105 (Steven Corcoran trans., 2019) [hereinafter Mbembe, NECROPOLITICS BOOK] ("Thus the calls for

brought about the dissolution of the human subject such that capital now "only retains anthropological characteristics as a symptom of underdevelopment; reformatting [human] behavior as inertia to be dissipated in self-reinforcing artificiality."[12] Curtis Yarvin, the movement's central prophet, argues that democracy is nothing more than a failed operating system.[13] Technology executives have taken up the crusade. Sam Altman calls AI the catalyst for a forced renegotiation of the social contract.[14] Oracle's Larry Ellison envisions a surveillance state in which citizens are "constantly recording and reporting everything."[15] And Peter Thiel, who directly finances neoreactionary politicians and policies,[16] has stated

---

the exit from democratic society and for total corporate and absolute dictatorship.").

[12] Land, *supra* note 10, at 46. Land's accelerationist framework holds that capital is a self-organizing intelligence for which biological human subjects and their institutional arrangements function as transitional substrate, and that democratic governance represents the "primate behaviour" whose dissipation the singularity confirms.

[13] *See* Ava Kofman, *Curtis Yarvin's Plot Against America*, NEW YORKER (June 2, 2025), https://www.newyorker.com/magazine/2025/06/09/curtis-yarvin-profile [https://perma.cc/AZ7R-P3VX]; *see also* Peter Jamison & Elizabeth Dwoskin, *Curtis Yarvin Helped Inspire DOGE. Now He Scorns It*, WASH. POST (May 8, 2025), https://www.washingtonpost.com/politics/2025/05/08/curtis-yarvin-doge-musk-thiel [https://perma.cc/UE3P-FGNJ].

[14] *See* Alexandra Bustos Iliescu, *AI and the Social Contract: How Sam Altman Envisions Tomorrow's World*, AI FOR GOOD (July 15, 2024), https://aiforgood.itu.int/ai-and-the-social-contract-how-sam-altman-envisions-tomorrows-world [https://perma.cc/A8BQ-77WV] (quoting Sam Altman) ("I still expect that there will be some change required to the social contract given how powerful we expect this technology to be . . . the whole structure of society itself will be up for some degree of debate and reconfiguration.").

[15] *See* Christian Hetzner, *Larry Ellison Predicts Rise of the Modern Surveillance State*, FORTUNE (Sept. 17, 2024), https://fortune.com/2024/09/17/oracle-larry-ellison-surveillance-state-police-ai [https://perma.cc/SX4A-6THG].

[16] *See* Elizabeth Dwoskin, Cat Zakrzewski, Nitasha Tiku & Josh Dawsey, *Inside the Powerful Peter Thiel Network That Anointed JD Vance*, WASH. POST (July 28, 2024), https://www.washingtonpost.com/technology/2024/07/28/jd-vance-peter-thiel-donors-big-tech-trump-vp [https://perma.cc/U86V-4PRK].

plainly that he no longer believes that freedom and democracy are compatible.[17]

Under recent advances in AI sits the humble algorithm. In computational contexts, algorithms translate human decision-making into executable code that generates outputs according to specified rules.[18] Algorithms are, in a reductionist sense, any system comprised of a set of task instructions, with some having argued that the law itself is an algorithm.[19] A credit scoring algorithm transforms applicant data into lending decisions by applying predetermined criteria.[20] These systems encode human judgment into automated processes that persist indefinitely, without requiring the continued existence or consent of their creators.[21] Nor do the governed merely inherit

---

[17] *See* Peter Thiel, *The Education of a Libertarian*, CATO UNBOUND (Apr. 13, 2009), https://www.cato-unbound.org/2009/04/13/peter-thiel/education-libertarian [https://perma.cc/7ERG-DAUP]. Thiel's theoretical commitments derive from Carl Schmitt's decisionist theory of sovereignty. *See* Peter Thiel, *The Straussian Moment*, *in* POLITICS AND APOCALYPSE (Robert Hamerton-Kelly ed., 2007) (acknowledging Schmitt as one of three thinkers who "dominate political science" after 9/11); *see also* CARL SCHMITT, POLITICAL THEOLOGY: FOUR CHAPTERS ON THE CONCEPT OF SOVEREIGNTY 5 (George Schwab trans., 1985) (1922) ("Sovereign is he who decides on the exception.").

[18] Kristian Lum & Rumman Chowdhury, *What Is an 'Algorithm'? It Depends on Whom You Ask*, MIT TECH. REV. (Feb. 26, 2021), https://www.technologyreview.com/2021/02/26/1020007/what-is-an-algorithm [https://perma.cc/68QE-WU5Q]; *see also* Langdon Winner, *Do Artifacts Have Politics?*, 109 DAEDALUS 121, 123–24 (1980) (illustrating how technical arrangements embody political choices through Robert Moses's Long Island parkway overpasses, which were built too low for buses and thereby kept poor and Black residents who relied on public transit off the parkways).

[19] *See* James Grimmelmann, *Regulation by Software*, 114 YALE L.J. 1719, 1722 (2005) (arguing that software and law share a structural identity as systems of conditional rules that govern conduct through automated command).

[20] Mikella Hurley & Julius Adebayo, *Credit Scoring in the Era of Big Data*, 18 YALE J.L. & TECH. 148, 159 (2016).

[21] *See* Zachary L. Catanzaro, *Algorithmic Dead Hands: What is Dead May Never Die*, 35 FORDHAM INTELL. PROP., MEDIA & ENT. L.J. 83, 97–103 (2024) (developing the "recursive capture" thesis: algorithmic systems encode the sovereign preferences of their designers into autonomous computational infrastructure that persists beyond the biological death of

that judgment: their movement patterns, health records, credit transactions, and compliance scores train the very models that govern them.[22] The subject of algorithmic governance does not simply live under encoded preference. She produces it, and in producing it she ceases to be separable from the architecture that governs her.[23]

Computational sophistication has thus become irrelevant to the political question. Some algorithmic systems operate through rule-based decision trees, applying predetermined criteria to deny healthcare claims, flag tax returns for audit, or determine access to housing and employment.[24] Others employ machine learning models that identify patterns in ways their creators cannot fully explain.[25] A rule-based system and a neural network present the same structural problem: both encode the preferences of their designers into autonomous processes that persist beyond biological death and resist democratic oversight mechanisms.

Intellectual property law treats algorithms as proprietary trade secrets, preventing citizens, regulators, and even judges from examining the criteria that govern access to healthcare,

---

those designers, implementing governance without requiring their continued existence, consent, or even comprehension of what the system has become).

[22] *See* FOUCAULT, HISTORY OF SEXUALITY, *supra* note 2, at 139 (establishing biopower as the foundational political form: the optimization of living bodies through governmental instruments, the mode of sovereignty that administers populations rather than merely commanding them); *but see* JEAN BAUDRILLARD, THE MIRROR OF PRODUCTION 19–31 (Mark Poster trans., 1975) (arguing that what machinery encodes is not accumulated human knowledge faithfully transferred but a simulation of knowledge, a model answerable to nothing outside itself); SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER 63–97 (2019).

[23] *See* Land, *supra* note 10.

[24] *See generally* Rebecca K. Slaughter, *Algorithms and Economic Justice: A Taxonomy of Harms and a Path Forward for the Federal Trade Commission*, 23 YALE J.L. & TECH. 1 (2021) (Special Issue) (describing the harms that algorithmic decision-making has caused in health care, employment, and housing).

[25] Yavar Bathaee, *The Artificial Intelligence Black Box and Failure of Intent and Causation*, 31 HARV. J.L. & TECH. 889, 892–94 (2018).

credit, and employment.[26] Institutional capture transforms organizations into entities structurally dependent on algorithmic outputs: healthcare insurers build entire claims departments around automated denial systems, and replacing them requires reorganizing workflows, retraining personnel, and accepting operational disruption that quarterly earnings cannot absorb.[27] Operational speed enables algorithmic decisions to outpace democratic response, the decision made and implemented before any accountability mechanism could intervene.[28] Continuous self-modification and self-recursion push complex systems beyond their designers' comprehension, severing external constraint at its source.[29] Each

---

[26] Dennis D. Crouch, *Using Intellectual Property to Regulate Artificial Intelligence*, 89 MO. L. REV. 784 (2024); *see also* Ashley S. Deeks, *The Judicial Demand for Explainable Artificial Intelligence*, 119 COLUM. L. REV. 1829, 1846 (2019) (observing that producers of proprietary sentencing algorithms have resisted revealing how their tools work on the basis of trade secret claims, and proposing protective orders and surrogate models as ways to give judges explanations without compelling disclosure).

[27] *See* Bob Herman et al., *How Cigna Saves Millions by Having Its Doctors Reject Claims Without Reading Them*, PROPUBLICA (Mar. 25, 2023), https://www.propublica.org/article/cigna-pxdx-medical-health-insurance-rejection-claims [https://perma.cc/8KZN-86E2] (documenting that Cigna's PxDx system processed over 300,000 prior authorization denials in two months, with medical directors averaging 1.2 seconds of review per claim); *see also* Kisting v. Cigna, 780 F. Supp. 3d 985 (E.D. Cal. 2025) (order denying motion to dismiss) (allowing breach of fiduciary duty claims to proceed). *See generally* Ryan Calo & Danielle Keats Citron, *The Automated Administrative State: A Crisis of Legitimacy*, 70 EMORY L.J. 797 (2021) (arguing that agencies forfeit their expertise- and discretion-based justifications for delegated authority when they offload decisions to automated systems they neither design nor understand); Danielle Citron, *Technological Due Process*, 85 WASH. U. L. REV. 1249 (2008) (contending that automated decision systems collapse the distinction between rulemaking and adjudication).

[28] Charlotte A. Tschider, *Beyond the Black Box*, 98 DENV. L. REV. 683, 692–96 (2021); *see also* Maciej Kuziemski & Gianluca Misuraca, *AI Governance in the Public Sector*, 44 TELECOMM. POL'Y 101976, 3–4 (2020) (describing how the pace of public-sector adoption of automated decision-making has outstripped governments' capacity to audit the technologies they commission, allowing algorithmic outputs to pass as objective and neutral while escaping scrutiny).

[29] Bathaee, *supra* note 25, at 898–902; *see also* German I. Parisi et al.,

accommodation completes the recursive loop: legal constraints designed to limit algorithmic power feed back into the system as variables to minimize, transforming oversight into optimization.[30]

These systems differ from prior forms of posthumous control in that they have eliminated the living interpreter. Wills and trusts, constitutional provisions, and legislative enactments preserve influence beyond death.[31] Each requires living intermediaries: trustees who exercise discretion, courts that interpret ambiguous language, legislatures that repeal outdated statutes. The interpreter was the point of vulnerability because living implementation requires interpretation, which introduces the possibility of revision, so that liberal democracy can survive and renegotiate its inherited arrangements.[32] Algorithmic systems eliminate this space for negotiation: where a trust requires human trustees subject to democratic processes, an algorithm requires only electricity and embodiment.[33] What Silicon Valley calls optimization is governance without accountability.[34] Democratic norms

---

Continual Lifelong Learning with Neural Networks: A Review, 117 NEURAL NETWORKS 238, 7 (2019) ("A lifelong learning system is defined as an adaptive algorithm capable of learning from a continuous stream of information," such that its behavior at deployment may diverge substantially from behavior at design).

[30] *See generally* Zachary L. Catanzaro, *The Dead Law Theory: The Perils of Simulated Interpretation*, 79 FLA. L. REV. (forthcoming 2027) (arguing that originalism's methodological commitments made the computational displacement of legal interpretation both structurally inevitable and simulative in function).

[31] *See also* Yaniv Roznai, *Necrocracy or Democracy? Assessing Objections to Constitutional Unamendability*, *in* AN UNAMENDABLE CONSTITUTION? (Richard Albert & Bertil Emrah Oder eds., 2018) (using "necrocracy" in constitutional law to denote unamendable provisions that "exacerbate the 'dead hand' of the past" by encoding the preferences of prior sovereigns as binding constraints on future democratic revision). *See generally* Karen J. Sneddon, *Speaking for the Dead: Voice in Last Wills and Testaments*, 85 ST. JOHN'S L. REV. 683 (2011) (explaining that wills allow a testator's "voice" to continue influence their estate from beyond the grave).

[32] Catanzaro, *Algorithmic Dead Hands*, *supra* note 21.

[33] *See* ZUBOFF, *supra* note 22, at 63–97.

[34] *See* HANNAH ARENDT, EICHMANN IN JERUSALEM: A REPORT ON THE BANALITY OF EVIL 289 (1963) (identifying bureaucracy as "the rule of

become parameters to optimize, not principles to uphold.

Current algorithmic systems do not merely prefigure the singularity, they constitute its infrastructure. LLMs encode the value judgments of their training data, generating outputs that reflect preserved intentionality long after their programmers have died.[35] What distinguishes the singularity from today's algorithms is degree, not kind.[36] Constitutional democracy was built on the opposite premise. Where monarchies seek transcendence and theocracies claim divine continuity, democracy requires natality: the capacity to begin something genuinely new that interrupts automatic processes.[37] Foucault argued that the sovereign's right to kill had given way to the administration of life in the governing bodies, optimizing populations, normalizing conduct without juridical command.[38] Mbembe pressed Foucault's logic to its limit: certain populations are governed not into life but into social death,

---

Nobody," a structure of diffused responsibility in which no identifiable person bears moral accountability for systematic harm, because each actor executes the system's outputs rather than exercising independent judgment); *see also* Jill Lepore, *The Rise and Fall of the Artificial State* (2026) (hereinafter Lepore, *Artificial State*) (drawing on Arendt to trace the displacement of the liberal nation-state by automated rule exercised without the consent of the governed).

[35] Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 84–86, 97–98.

[36] *See* Vernor Vinge, *The Coming Technological Singularity: How to Survive in the Post-Human Era*, S.D. STATE UNIV. DEP'T OF MATHEMATICAL SCIS. (1993), https://edoras.sdsu.edu/~vinge/misc/singularity.html [https://perma.cc/T7RR-Z6PX]; *see* Kuziemski & Misuraca, *supra* note 28, at 2–4.

[37] *See* HANNAH ARENDT, THE HUMAN CONDITION 177–78 (1958) (developing natality as the philosophical foundation of political action: the human capacity to begin something genuinely new interrupts the automatic processes that would otherwise determine the future; democracy institutionalizes this capacity through regular renewal of authority); *see also* STEVEN LEVITSKY & DANIEL ZIBLATT, HOW DEMOCRACIES DIE 3–5 (2018) (observing that democracies today die less often at the hands of the generals than of elected leaders who subvert the very process that brought, them to power, eroding democratic institutions slowly, "in barely visible steps").

[38] *See infra* Section III.A (developing Foucault's account of biopower: the sovereign's right to kill gave way to governance through life's regulation, administering populations through disciplinary mechanisms and biopolitical management).

held in zones where existence depends on the system's sufferance rather than right.[39] In Part II, I trace the lineage that Foucault and Mbembe described to our present moment.[40]

Between them, they mapped every dimension of governance's relationship to death except one. Both frameworks assume a living administrator. Neither asked what democracy confronts when the administrator is already gone. Ruling elites have ceaselessly sought to escape mortality's constraint. And while none have overcome death, algorithms never die. This is the structural condition of the *algorithmic death-world*. Part III argues that the emergence of the algorithmic necrocracy serves as a new modality of neocameralist governance, distinct from Foucault's biopower and Mbembe's necropolitics precisely because it governs human subjects without a living interpreter.[41] Part IV demonstrates the coercive effect of recursive capture on democratic failsafes and identifies the institutions and constitutional protections capable of resisting it.[42]

II. The Sovereignty of Death

Every sovereign has claimed the right to decide life and death and none has yet escaped it. This is the Western political tradition's load-bearing wall. As Foucault argued, "[f]or a long

---

[39] *See infra* Section III.B (recounting Mbembe's necropolitics: certain populations are governed into conditions of social death, held in zones where existence depends on the system's sufferance rather than right, a logic algorithmic governance extends and accelerates).

[40] *See infra* Part II (tracing the historical architecture of sovereignty's encounters with mortal constraint, from the Greek polis through the Enlightenment settlement, and establishing the predicate for Part III's synthesis of Foucault's biopower and Mbembe's necropolitics into this Article's original contribution: algorithmic necrocracy as a structurally distinct third form, neither the administration of life nor the management of who dies, but the persistence of the dead's encoded preferences as operative governance logic for the living); *infra* Part III (developing algorithmic necrocracy as an original theoretical contribution that extends beyond both biopower and necropolitics by eliminating the living administrator each framework presupposes).

[41] *See infra* Part III.

[42] *See infra* Part IV.

time, one of the characteristic privileges of sovereign power was the right to decide life and death."[43] Foucault traced how sovereignty and mortality bound together across three historical stages: classical antiquity, which turned death into political technology; medieval theology, which turned it into spiritual currency; and the Enlightenment, which turned it into democracy's essential resource. Each stage expanded what sovereignty could do, yet none escaped the boundaries of what it could not.

A. The Political Death

Algorithms now determine the political economy of a human life. The algorithm's veneer of objectivity obscures what the framework it replaced makes visible: this is a political determination about who deserves to live as a full member of our political community. The ancient Greeks pioneered the architecture of political death. The Greek city-states were one of the first polities to construct all three elements of this architecture simultaneously: a mechanism for classifying whose death mattered, an institutional infrastructure for enforcing that classification, and a theory, *citizenship*, that made the distinction appear natural rather than political. Citizenship itself was organized through the management of dying: full citizens received ritualized burial in the necropolis with elaborate funeral rites, while slaves and foreigners were interred in unmarked graves.[44] The spatial and ceremonial differentiation produced the social hierarchies it appeared to reflect, mapping the boundaries of political belonging onto the landscape of death.

The Greek legislator Draco is credited with codifying this structure into positive law. The polis acquired the exclusive right to impose death as punishment, converting retributive violence from a familial matter into a choreographed display of public authority. Execution became a technology of sovereign power precisely because it was visible, deliberate, and

---

[43] *See* FOUCAULT, HISTORY OF SEXUALITY, *supra* note 2, at 135.

[44] *See* BAUDRILLARD, SYMBOLIC EXCHANGE AND DEATH, *supra* note 1, at 185 (identifying the computer bank and the archive as modernity's true necropolises, spaces from which all human noise has been expunged).

contestable. Each determination had an author. The magistrate who classified a body as deserving civic burial or a criminal as deserving execution exercised judgment that could be disputed, subverted, or condemned by those who witnessed it. That visibility was the mechanism through which authority invited contestation and confirmed its own legitimacy.[45]

The governed subject who accepts the authority of a system while contesting its moral legitimacy is the oldest figure in Western political thought. Socrates' trial of 399 BCE reflected how political death became a site of philosophical resistance. His death revealed not merely naked state violence, but the capacity for individual autonomy to transcend it, establishing a paradigm that would shape Western political thought for centuries.[46]

The magistrate's judgment was corruptible, and that political corruptibility was a limit on sovereign excess. Political contestation was possible because judgment was present and could be subverted. Technical systems claim legitimacy precisely because there is no human author whose judgment can be disputed. The patient whose claim is denied by an automated system can appeal a process, but no one decided her fate. The Socratic paradigm requires an interlocutor at the

---

[45] JOSIAH OBER, MASS AND ELITE IN DEMOCRATIC ATHENS: RHETORIC, IDEOLOGY, AND THE POWER OF THE PEOPLE 74 (1989) (describing how Draco's codification transferred retributive violence from familial to civic authority, establishing the polis as the exclusive legitimate actor in capital determinations); *see also* MICHAEL GAGARIN, DRAKON AND EARLY ATHENIAN HOMICIDE LAW 52–58 (1981) (analyzing how Draco's homicide law institutionalized the distinction between private vengeance and public punishment). Draco was the first legislator of Athens, having written the city-state's first comprehensive written code around 621 BCE. *See Draco*, ENCYCLOPEDIA BRITANNICA (Feb. 8, 2024), https://www.britannica.com/biography/Draco-Greek-lawgiver [https://perma.cc/AN2J-422J].

[46] *See* PLATO, PHAEDO 15–16 (Benjamin Jowett trans., 2013) (Socrates' composed acceptance of his death sentence prompts philosophical dialogues among spectators; his refusal to abandon his principles even under sentence of death establishes that the governed subject may contest the moral legitimacy of the system while accepting its authority, a form of resistance algorithmic governance structurally forecloses by eliminating the identifiable author whose judgment can be disputed).

moment of judgment and the algorithm provides none. Baudrillard termed this a "perfect actuarial death", a deduction made through the cold logic of statistical simulation rather than explicit political determination.[47]

The algorithm not only determines the fate of individual bodies, but establishes the very systems of differentiation that define degrees of access to care and, by extension, to full political life.[48] Our modern "true necropolises" observed Baudrillard, "are no longer the cemeteries, hospitals, wars, hecatombs; death is no longer where we think it is. . . our societies' true necropolises are the computer banks or the foyers, blank spaces from which all human noise has been expunged, glass coffins where the world's sterilised memories are frozen."[49]

B. The Social Death

China's Social Credit System is an evolving assemblage of blacklists, regulatory ratings, and municipal scoring pilots, that subjects hundreds of millions of people to data-driven behavioral evaluation.[50] Geographic and mapping software

---

[47] *See* Jean Baudrillard, *The Masses: The Implosion of the Social in the Media*, 16 NEW LITERARY HIST. 577, 577–89 (Marie Maclean trans., 1985).

[48] *See id.*

[49] *See* BAUDRILLARD, SYMBOLIC EXCHANGE AND DEATH, *supra* note 1, at 185.

[50] *See* State Council, Planning Outline for the Construction of a Social Credit System (2014–2020), Guofa [2014] No. 21 (promulgated June 14, 2014) (China), *translated in* China Copyright & Media (Rogier Creemers ed., 2015), https://chinacopyrightandmedia.wordpress.com/2014/06/14/planning-outline-for-the-construction-of-a-social-credit-system-2014-2020/ [https://perma.cc/KYM9-LQRP]. The System is not a single nationwide score but an evolving assemblage of central blacklists, sectoral regulatory ratings, and municipal pilot programs. *See* Rogier Creemers, China's Social Credit System: An Evolving Practice of Control 2–3 (May 9, 2018) (unpublished manuscript), https://ssrn.com/abstract=3175792 [https://perma.cc/33S9-NZJD]; *see generally* Vincent Brussee, Social Credit: The Warring States of China's Emerging Data Empire (2023) (providing a comprehensive assessment of China's infamous Social Credit System that has re-shaped global notions of surveillance). The example is offered not to equate an authoritarian party-state with a constitutional democracy, but

detects when blacklisted citizens stray from designated regions. The "joint punishment" mechanism restricts access to transportation, employment, education, and financial services based on algorithmically evaluated conduct.[51] The mechanism mirrors the Roman practice of *infamia*, which stripped civic rights and social recognition based on designated conduct.[52] By 2018, over twenty-three million Chinese citizens had been barred from purchasing airline tickets through automated scoring.[53] Social death, the condition of the politically living who are administratively treated as dead, is here manufactured

---

because the technique is not peculiarly Chinese: the surveillance architecture on which it rests was built in significant part with American hardware, software, and expertise supplied to Party and public security organs. *See, e.g.*, Doe I v. Cisco Sys., Inc., 73 F.4th 700 (9th Cir. 2023) (permitting aiding-and-abetting claims to proceed on allegations that Cisco designed and built components of the "Golden Shield" surveillance system for Chinese Communist Party and public security officials); Paul Mozur & Don Clark, *China's Surveillance State Sucks Up Data. U.S. Tech Is Key to Sorting It.*, N.Y. TIMES (Nov. 22, 2020) (Intel and Nvidia chips powering a Xinjiang police computing center); Mara Hvistendahl, *How Oracle Sells Repression in China*, THE INTERCEPT (Feb. 18, 2021); *cf.* Addition of Certain Entities to the Entity List, 84 Fed. Reg. 54,002 (Oct. 9, 2019) (to be codified at 15 C.F.R. pt. 744) (restricting exports to Chinese surveillance firms dependent on U.S. technology). Nor is behavioral scoring foreign to democratic governance. *See* Danielle Keats Citron & Frank Pasquale, *The Scored Society: Due Process for Automated Predictions*, 89 WASH. L. REV. 1 (2014).

[51] *See also* Dake Kang & Yael Grauer, *Silicon Valley Enabled Brutal Mass Detention and Surveillance in China*, ASSOCIATED PRESS (Sept. 9, 2025) (explaining how China has employed use mass surveillance technologies to track and prevent "troublemakers" from leaving their provinces and homes). *See generally* Drew Donnelly, *China Social Credit System Explained*, JOINHORIZONS (Feb. 11, 2024) (explaining how China's Social Credit System works and can lead to loss in access to education, transportation, employment, and financial opportunities).

[52] *See* Imran A. Rašljanin, *Infamia in the Sight of Roman Law*, 2 SCI. INT'L J. 53, 54–55 (2023); *see also* BAUDRILLARD, SYMBOLIC EXCHANGE AND DEATH, *supra* note 1, at 165 (arguing that institutional power rests on administering the partition between the living and dead).

[53] *See* Lily Kuo, *China Bans 23m from Buying Travel Tickets as Part of 'Social Credit' System*, GUARDIAN (Mar. 1, 2019), https://www.theguardian.com/world/2019/mar/01/china-bans-23m-discredited-citizens-from-buying-travel-tickets-social-credit-system [https://perma.cc/39NP-57K4].

algorithmically, at scale, without judicial process and beyond any individual official's discretion.

The American record mirrors this pattern. The Los Angeles Police Department's Operation LASER (Los Angeles Strategic Extraction and Restoration) generated "chronic offender bulletins" quantifying risk scores based on arrests and gang affiliations, creating social stratification through algorithmic rather than explicitly legal determination.[54] Although the program was shuttered in 2019 after public outcry, the model persists in dozens of jurisdictions under different names.[55] In *State v. Loomis*, the Wisconsin Supreme Court upheld risk assessment algorithms in criminal sentencing despite acknowledging the defendant could neither examine nor challenge the system.[56] By deferring to computational authority, the court established mechanized *imperium*: authority that operates beyond democratic accountability because citizens cannot meaningfully contest its determinations. Where Roman law preserved power through legal succession requiring ongoing human interpretation, *Loomis* entrenched algorithmic governance through judicial legitimation, creating hierarchies that resist democratic oversight from within the system designed to provide it.

Rome invented these mechanisms of posthumous authority. The doctrine of *potestas* established the near-

---

[54] *See generally* VIRGINIA EUBANKS, AUTOMATING INEQUALITY: HOW HIGH-TECH TOOLS PROFILE, POLICE, AND PUNISH THE POOR 159 (2018) (analyzing how algorithmic risk scoring replicates and automates the political determinations of traditional sovereign power through the veneer of statistical neutrality).

[55] *See* C. Uchida & M.L. Swatt, *Operation LASER and the Effectiveness of Hotspot Patrol: A Panel Analysis*, 16 POLICE Q. 287 (2013) (describing the chronic offender bulletin system); *see also The LAPD's Operation LASER: Automating Police Harassment*, STOP LAPD SPYING COALITION (2019) (documenting the program's termination following community opposition and disclosure of racially disparate implementation).

[56] *See* State v. Loomis, 881 N.W.2d 749, 761 (Wis. 2016) (court deferred to proprietary algorithm despite acknowledging defendant could not examine or challenge system); FRANK PASQUALE, THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION 8, 19 (2015) (analyzing how technical complexity enables systems to evade meaningful accountability).

absolute power of the *paterfamilias* over the life and death of those under his household authority and vested this power across generations.[57] *Vitae necisque potestas* positioned him as sovereign within the domestic sphere: the authority to condemn, ostracize, and execute. Roman law drew a structural distinction between private and public authority over life. Within the household, the *paterfamilias* wielded *vitae necisque potestas*: the sovereign authority to condemn, ostracize, and execute dependents, which required no judicial process and answered to no external authority. The emperor and magistrates wielded *imperium* over the public sphere: authority over citizens, requiring institutional form, capable of producing backlash when exercised in excess. The supremacy of *imperium* enabled sovereignty to survive emperors through delegation and imperial cult practices.[58]

Private power operated without procedure, while public power operated within procedure, however corruptible that procedure was. This two-track architecture persists in modern algorithmic governance's parallel division. Healthcare denial algorithms thus operate in the space where the *paterfamilias* once ruled: within a nominally private domain, through processes citizens cannot examine, toward determinations they cannot meaningfully contest. DOGE's computational optimization and predictive policing systems[59] exercise the

---

[57] *See* GEORGE LONG, PATRIA POTESTAS 873–75 (William Smith ed., 1875); *see also* Fred K. Drogula, *Imperium, Potestas, and the Pomerium in the Roman Republic*, 56 HISTORIA 419, 420–21 (2007) (distinguishing *potestas* the civil authority Roman magistrates exercised within the city, from *imperium*, the military command authority that, with few exceptions, could be exercised only outside the *pomerium*.

[58] Drogula, *supra* note 57, at 421.

[59] The Department of Government Efficiency ("DOGE") is not a cabinet department but a presidential initiative created by executive order on January 20, 2025, which renamed the United States Digital Service the "United States DOGE Service," placed it within the Executive Office of the President, and directed every agency to host an embedded "DOGE Team" with access to unclassified agency records, software, and information technology systems. *See* Exec. Order No. 14,158, 90 Fed. Reg. 8441 (Jan. 29, 2025). Under that mandate, DOGE personnel obtained access to federal payment, personnel, and benefits databases and deployed automated tools to review contracts, grants, and regulations. *See, e.g.*, Soc. Sec. Admin. v.

computational equivalent of *imperium*: public authority claiming institutional legitimacy while eliminating the procedural accountability that made ancient *imperium*, at least in principle, answerable.[60] Roman law also pioneered the transmission of authority beyond death. *Patria potestas* established political continuity by vesting patriarchal power in successive generations.[61] *Imperium maius* enabled sovereignty to survive emperors through delegation and imperial cult. These were structural innovations: legal fictions that allowed governance to persist after the biological death of any individual holder of power.

Yet legal fictions required living hands to carry them. *Patria potestas* and *imperium maius* adapted to new circumstances because Roman jurists bent them: successive interpreters applying posthumous authority to conditions their architects never anticipated. Algorithmic systems cannot be bent, they implement encoded preferences through autonomous technical architectures requiring no ongoing human intervention, and no jurist mediates between the encoded rule and its application. That is the structural difference the Roman tradition never faced: the living interpreter was no procedural ornament, but was the mechanism by which inherited authority remained answerable to someone alive, someone who could be asked why the rule demanded what it demanded. Death came to constrain what it could not destroy. The Church understood

---

Am. Fed'n of State, Cnty. & Mun. Emps., No. 24A1063, slip op. at 2 (U.S. June 6, 2025) (staying injunction that had barred DOGE personnel from accessing Social Security Administration records); Makena Kelly & Vittoria Elliott, *DOGE Is Building a Master Database to Surveil and Track Immigrants*, Wired (Apr. 18, 2025, 5:40 PM), https://www.wired.com/story/doge-collecting-immigrant-data-surveil-track/ [https://perma.cc/L9HP-C6PG].

[60] Drogula, *supra* note 57, at 422–24 (distinguishing the domestic authority of *vitae necisque potestas* from the public authority of imperium on structural grounds: the former required no institutional procedure; the latter carried formal constraints that, however imperfect, preserved the form of accountability); *see also* RICHARD P. SALLER, PATRIARCHY, PROPERTY AND DEATH IN THE ROMAN FAMILY 115–16 (1994) (demonstrating that *patria potestas* operated as a private governance structure parallel to, not subordinate to, the public imperial authority).

[61] *See* Rašljanin, *supra* note 52, at 54–55.

that constraint as a problem institutional design could solve.

C. The Spiritual Death

The medieval Church called it *mortmain*: the dead hand. Ecclesiastical institutions accumulated wealth in perpetuity because divine instruments were understood to operate on a temporal horizon that transcended any individual's mortality.[62] The English Parliament's Statute of Mortmain of 1279 treated the Church's accumulations as a political threat requiring legislative restraint.[63] Building upon Justinian I's *Corpus Juris Civilis*, which established that legitimate political authority required both formal legal recognition and effective power,[64] Byzantine and later Western jurists developed theories positioning the Church as mediator between earthly and eternal sovereignty.[65]

Medieval political theory thus distinguished between temporal sovereignty (authority over physical territories and bodies) and eternal sovereignty (authority over the spiritual afterlife).[66] European monarchs claimed authority over earthly domains (justified through divine right) while ecclesiastical institutions asserted exclusive jurisdiction over spiritual matters, including death, salvation, and the afterlife.[67] The

---

[62] *See* EUGENE MCCARRAHER, THE ENCHANTMENTS OF MAMMON: HOW CAPITALISM BECAME THE RELIGION OF MODERNITY 37–68 (2019); Statute of Mortmain, 7 Edw. 1, st. 2, c. 1 (1279) (Eng.) (restricting ecclesiastical acquisition of land held in perpetuity). The term "mortmain," from the Old French for "dead hand," is the etymological source of the dead-hand doctrine in Anglo-American property law.

[63] *See* Statute of Mortmain, 7 Edw. 1, st. 2, c. 1 (1279) (Eng.); Quia Emptores, 18 Edw. 1, c. 1 (1290) (Eng.).

[64] *See* ERNST H. KANTOROWICZ, THE KING'S TWO BODIES 192 (Princeton Univ. Press 2016) (1957) ("In the Age of Jurisprudence the sovereign state archives a hallowing of its essence independent of the Church, though parallel to it, and assumed the eternity of the Roman empire as the king became and 'emperor within his own realm.'").

[65] *See id.* at 117.

[66] *Id.*

[67] *See* BAUDRILLARD, SYMBOLIC EXCHANGE AND DEATH, *supra* note 1, at 165 ("[T]he Church was established on the bipartition of survival, or the afterlife, from life, the earthly world and the Kingdom of Heaven. It kept a jealous watch over this partition, for if the distance disappeared, its power would be at an end.").

Church's spiritual authority manifested through sacramental control, gatekeeping access to the afterlife through burial rites, excommunication, and indulgences.[68]

The Church came to claim exclusive jurisdiction over death, salvation, and the afterlife, positioning itself as mediator between earthly and eternal sovereignty; Pope Gregory VII's excommunication of Henry IV in 1076 reinforced, for a time, that the temporal power of the European Monarchs depended on that recognition.[69] Aquinas distinguished between mortal officeholders and enduring institutions oriented toward the common good, grounding authority in a living interpretive community rather than an autonomous spiritual operation beyond the reach of the living.[70] Martin Luther challenged the Church's claims of exclusive jurisdiction over death and salvation, fundamentally reconstructing the relationship between temporal mortality and sovereignty.[71] His argument

---

[68] *Id.* ("The institution of death, like that of the afterlife and immortality, is a recent victory for the political rationalism of castes, priests and the Church: their power is based on the management of the imaginary sphere of death."); *see also* PLATO, PHAEDO (Benjamin Jowett trans., 2013) ("Death is the separation of soul and body—and the philosopher desires such a separation."). *See generally* MADELEINE GRAY, A COMPANION TO DEATH, BURIAL, AND REMEMBRANCE IN LATE MEDIEVAL AND EARLY MODERN EUROPE, C. 1300-1700, at 106–31 (detailing the Church's last rites and rituals from deathbed to burial in medieval Europe).

[69] THOMAS AQUINAS, ON KINGSHIP, TO THE KING OF CYPRUS 67 (Gerald B. Phelan trans., I. Th. Eschmann rev., 1949); *see also* THOMAS AQUINAS, SUMMA THEOLOGICA pt. II-II, q. 60, art. 6 (Fathers of the Eng. Dominican Province trans., 1921) (reasoning that secular power is subject to spiritual power as the body is to the soul, so that spiritual authority does not usurp judgment when it intervenes in temporal matters within its charge); *see generally* Uta-Renate Blumenthal, *The Investiture Controversy: Church and Monarchy from the Ninth to the Twelfth Century* (1988) (recounting Gregory VII's excommunication of Henry IV and the ensuing contest over royal authority).

[70] *See* GERD ALTHOFF, RULES AND RITUALS IN MEDIEVAL POWER GAMES 193 (2019).

[71] Luther's challenge had fourteenth-century antecedents in Marsilius of Padua's *Defensor Pacis* and William of Ockham's *Short Discourse on Tyrannical Government*, with Marsilius recasting Aristotle's account of the sufficient life to confine coercive jurisdiction to this world and reserve judgment under divine law for the next, and Ockham denying the pope plenitude of power in temporal affairs while treating papal and imperial

that secular power derived legitimacy directly from God, unmediated by ecclesiastical control over death, provided theological foundations for secular territorial sovereignty.[72] Luther's theories engulfed Europe in centuries of religious warfare, culminating with the Peace of Westphalia of 1648, which ended ecclesiastical claims to temporal sovereignty and established the modern nation-state system.[73] The Church required living priests to carry its authority forward. That requirement was the structural limit. Algorithmic systems have no such requirement.[74]

Where ecclesiastical institutions promised eternal life

---

power alike as limited offices. *See* MARSILIUS OF PADUA, THE DEFENDER OF THE PEACE (Annabel Brett ed. & trans., 2005); WILLIAM OF OCKHAM, A SHORT DISCOURSE ON TYRANNICAL GOVERNMENT (Arthur Stephen McGrade ed., John Kilcullen trans., 1992); Martin Luther, *Secular Authority: To What Extent It Should Be Obeyed* 228, 251 (1523), reprinted in 3 Works of Martin Luther 228 (J.J. Schindel trans., 1930) (arguing that temporal government's laws reach only life, property, and external affairs, while God alone rules the soul)
; *see* MARTIN LUTHER, SECULAR AUTHORITY: TO WHAT EXTENT IT SHOULD BE OBEYED 15.

[72] *See* Martin Luther, *Temporal Authority: To What Extent It Should Be Obeyed* (1523), *reprinted in* 45 LUTHER'S WORKS 75, 85–93 (Walther I. Brandt ed., J.J. Schindel trans., 1962) (grounding the temporal sword in direct divine ordinance under Romans 13 and 1 Peter 2); Martin Luther, *To the Christian Nobility of the German Nation* (1520), *reprinted in* 44 LUTHER'S WORKS 115, 126–33 (James Atkinson ed., Charles M. Jacobs trans., 1966) (rejecting the claim that spiritual power stands above temporal power).

[73] *See* Derek Croxton, *The Peace of Westphalia of 1648 and the Origins of Sovereignty*, 21 INT'L HIST. REV. 569, 569 (1999) ("Yet anyone who studies the treaties in detail comes away disappointed, without finding a clear statement of the principle of sovereignty."). Today, the Peace of Westphalia is viewed as the birth of the modern state and international ordering, as defined on a territorial basis. *See* Steven D. Krasner, *Rethinking the Sovereign State Model*, 27 REV. INT'L STUD. 17 (2001).

[74] *See* Land, *supra* note 10, at 441; *see also* Thomas Homer-Dixon et al., *Anti-Democratic 'Dark Enlightenment' Ideas Have Spread from Silicon Valley to Washington*, CASCADE INST. REP. (2025) (tracing how Curtis Yarvin and Nick Land's "Dark Enlightenment" philosophy, which rejects democracy and other Enlightenment principles in favor of quasi-monarchical executive authority, spread from Silicon Valley to Washington).

through salvation, Silicon Valley now promises immortality through technology, a secular afterlife achieved through computational rather than divine preservation.[75] The Singularity envisions artificial intelligence surpassing human cognitive capabilities, enabling technological preservation of consciousness beyond biological death.[76] This secular eschatology reconfigures the religious promise of eternal life, replacing spiritual transcendence with computational persistence.[77]

D. The Temporal Death

The Enlightenment fundamentally reconstructed sovereignty by transforming death from divine signifier to natural limit on political power,[78] Sam Altman has observed

---

[75] *See* Brandon Perry, *After the Singularity, Will Humans Matter? – AI Researcher Consensus*, EMERJ (Mar. 2, 2019), https://emerj.com/after-the-singularity-will-humans-matter-ai-researcher-consensus/ [https://perma.cc/6CBM-TWQE] ("Society could potentially be organized in a number of ways, everything from a fully automated world where much of human decision-making has been handed off to AI, to a world with both human and post-human intelligence share power."); *see also* BAUDRILLARD, SYMBOLIC EXCHANGE AND DEATH, *supra* note 1, at 149 ("In the beginning, then, immortality was a matter of an emblem of power and social transcendence.").

[76] *See* Vinge, *supra* note 36 (quoting I.J. Good, *Speculations Concerning the First Ultraintelligent Machine*, in 6 Advances in Computers 31, 31–88 (Franz L. Alt & Morris Rubinoff eds., 1965) ("Let an ultraintelligent machine be defined as a machine that can far surpass all the intellectual activities of any man however clever. Since the design of machines is one of these intellectual activities, an ultraintelligent machine could design even better machines; there would then unquestionably be an 'intelligence explosion,' and the intelligence of man would be left far behind.")).

[77] *See* Giorgi Vachnadze, *The Bio-Politics of Artificial Intelligence: Pastoral Technologies and Eschatological Narratives*, EPOCHÉ PHIL. MONTHLY (July 2024), https://epochemagazine.org/73/the-bio-politics-of-artificial-intelligence-pastoral-technologies-and-eschatological-narratives/ [https://perma.cc/S6RQ-A54M] ("[W]e can add that the techno-scientific soteriology is premised on the promise of achieving perfect physical and mental health as a uniquely biopolitical form of salvation, with the concept of Artificial Intelligence playing a role analogous to that of God. A constant companion on our (mandatory) journey towards self-enhancement.").

[78] *See generally* DANIEL PHILPOTT, REVOLUTIONS IN SOVEREIGNTY: HOW IDEAS SHAPED MODERN INTERNATIONAL RELATIONS (2001) (discussing

that training a large language model costs less than feeding a human being for twenty years.[79] But the Hobbesian social contract assumed that the governed class (labor) was necessary and held separate and apart from capital.[80] When algorithmic systems replicate cognitive functions more cheaply than the humans who generate the underlying behavioral data, that assumption collapses.[81] Thomas Hobbes' *Leviathan* positioned violent death, not spiritual salvation, as the fundamental problem that necessitated government.[82] Individuals rationally transfer natural rights to the sovereign in exchange for protection from violent death, transforming mortality from spiritual concern into calculable political exchange. The state's protection against mortality, rather than divine right, became the moral basis for political obligation.[83]

Locke anchored political authority in protecting against the

---

how sovereignty transitioned from monarchies, where individuals held authority through divine right, to modern political systems where states became enduring sovereign entities); *see also What Is the Enlightenment and How Did It Transform Politics?*, COUNCIL ON FOREIGN RELS. (Feb. 17, 2023), https://education.cfr.org/learn/reading/what-enlightenment-and-how-did-it-transform-politics [https://perma.cc/LJS9-FCKL] (explaining that the Enlightenment challenged religious authority, reshaped politics, and revolutionized society through reason and science).

[79] *See Sam Altman Defends AI's Energy Toll by Saying it Also Takes a Lot to 'Train a Human,'* THE GUARDIAN (Feb. 23, 2026), https://www.theguardian.com/technology/2026/feb/23/sam-altman-openai-energy-use-datacenters [https://perma.cc/A72X-K2QF].

[80] *See* ZUBOFF, *supra* note 22, at 63–97 (arguing the protection-for-obedience bargain presupposes that the governed's participation generates irreplaceable value for the sovereign; surveillance capitalism dissolves that presupposition by harvesting behavioral surplus from populations whose direct labor has become economically superfluous, leaving subjugation intact after necessity has collapsed); *see also* MICHEL FOUCAULT, THE BIRTH OF BIOPOLITICS: LECTURES AT THE COLLÈGE DE FRANCE, 1978-1979, at 226–33 (Graham Burchell trans., 2008) (tracing how neoliberal governance reconstitutes homo economicus as human capital rather than laboring subject, severing the reciprocal dependency the Hobbesian contract assumed).

[81] *See* Land, *supra* note 10.

[82] *See* THOMAS HOBBES, LEVIATHAN 95–96 (W.G. Pogson Smith ed., Clarendon Press 1909) (1651).

[83] *See* G.D.H. COLE, THE SOCIAL CONTRACT AND DISCOURSES BY JEAN JACQUES ROUSSEAU 26 (Online Lib. of Liberty ed. 2011).

mortal threats of scarcity and insecurity.[84] Property in Locke's framework extends human agency through time, projecting intentions beyond immediate survival into futurity.[85] Without political institutions enforcing property rights across individual lifespans and beyond individual deaths, property collapses into temporary possession.[86] Locke's theory on property thus became a social governance structure, transcending mortality's immediate constraints through its support of stable institutions, while remaining ultimately subject to death's universal limit.[87]

Rousseau inverted the premise. Where Hobbes made mortality the problem requiring government, Rousseau made it government's essential resource: the biological mechanism that prevented any generation from permanently subjugating the next.[88] Where medieval theorists dreaded mortality as the enemy of institutional continuity, Rousseau embraced it as popular sovereignty's essential guardian. Death was not democracy's adversary. Death was a liberation. To live was to die. The general will exists only in the present sense and cannot be transmitted across generational lines.[89] To bind the living to the preferences of the dead ends legitimate authority rather

---

[84] *See* JOHN LOCKE, TWO TREATISES OF GOVERNMENT 165 (1689) ("[T]he supreme power cannot take from any man any part of his property without his own consent.").

[85] *See* David Jenkins, *The Lockean Constitution: Separation of Powers and the Limits of Prerogative*, 56 MCGILL L.J. 544, 549 (2011) ("Because the public good is normatively thin as an animating principle of government, Locke only proposes it as an abstracted moral imperative and justificatory basis for political power.").

[86] *Id.* ("Political society therefore exists for the purpose of better realizing natural law and protecting natural rights to life, liberty, and property.").

[87] *See* LOCKE, *supra* note 84, at 159 ("[H]e seeks out, and is willing to join in society with others, who are already united, or have a mind to unite, for the mutual preservation of their lives, liberties and estates, which I call by the general name, property.").

[88] ERNST H. KANTOROWICZ, THE KING'S TWO BODIES: A STUDY IN MEDIAEVAL POLITICAL THEOLOGY 15, 383 (1957) (perpetuity of the sovereign as the central anxiety of medieval political theory that Rousseau's democratic turn directly reversed).

[89] *See generally* Saeed Khodaverdian, *The Legacy of the (Poor) Deceased: The Effect of the Mortality Rate on Democracy*, 22 INT'L ECON. & ECON. POL'Y 64 (2025) (explaining the causal connection between mortality rates and democracy).

than extending it.[90]

Without mortality's regular interruption of accumulated power, political communities calcify into systems where the preferences of long-dead founders permanently constrain the autonomy of living citizens.[91] Mortality is democracy's foundational technology: the biological mechanism ensuring political authority remains subject to revision by those it governs.[92] Contemporary computational systems encode the preferences of their designers into processes that persist beyond biological death and execute without ongoing human authorization: the structural condition Rousseau identified as the end of legitimate authority.[93]

These technical features directly contradict Rousseau's principle of ongoing popular sovereignty: each generation must actively consent to the frameworks it inherits rather than receiving them as permanent structure.[94] So it came to be that

---

[90] *See* THE FEDERALIST No. 10 (James Madison).

[91] *See* THE FEDERALIST No. 72 (Alexander Hamilton); *see also* James L. Perry, *Federalist No. 72: What Happened to the Public Service Ideal?*, 71 PUB. ADMIN. REV. 143, 144 (2011) (revisiting Hamilton's defense of executive re-eligibility and administrative stability in Federalist No. 72 to ask what has become of the public service ideal it presupposed).

[92] *See* Letter from Thomas Jefferson to James Madison, Nat'l Archives (Sept. 6, 1789), https://founders.archives.gov/documents/Madison/01-12-02-0248 [https://perma.cc/6SZ9-EN63] ("I set out on this ground, which I suppose to be self-evident, 'that the earth belongs in usufruct to the living.'").

[93] *See* Kate Klonick, *The New Governors: The People, Rules, and Processes Governing Online Speech*, 131 HARV. L. REV. 1598, 1648–49 (2018) (arguing content moderation systems encode normative frameworks that subsequent engineers inherit rather than design); Arvind Narayanan, *Understanding Social Media Recommendation Algorithms*, KNIGHT FIRST AMEND. INST. (2023) (noting platform companies have disclosed almost nothing about the effects of their algorithms on user behavior across time); Hamed Taherdoost, *Smart Contracts in Blockchain Technology: A Critical Review*, 14 INFORMATION 1–2 (Feb. 13, 2023) (stating blockchain applications execute according to encoded rules that cannot be unilaterally modified after deployment, even by their original programmers).

[94] *See* Taherdoost, *supra* note 93, at 1–2 (documenting that blockchain applications execute according to encoded rules that cannot be unilaterally modified after deployment, even by their original programmers); *see also* Juan C. Perdomo et al., *Performative Prediction*, 119 Proceedings of the 37th Int'l Conf. on Machine Learning 7599, 7600 (2020) (demonstrating that

the Enlightenment produced constitutional democracy's animating premise, sovereignty derives its legitimacy from the ongoing consent of the living and expires with the generation that granted it. Renewal through the death function thus emerged as democracy's vital eschatology.

E. Rejecting the Dead Hand

Where Hobbes and Locke treated mortality as a problem requiring institutional containment, the American founders built a government that treated death's disruptive power as democracy's essential resource.[95] In *Federalist No. 10*, Madison connected mortality to the necessity of representative democracy, arguing that death's regular disruption of political relationships made pure democracy impractical beyond small scales.[96] His theory of competing factions assumed regular renewal of political alignments as generations passed. In *Federalist No. 72*, Hamilton argued that regular presidential succession, calibrated to human lifespans, provided essential renewal while preserving institutional continuity.[97]

---

algorithmic predictions actively reshape the social conditions they claim to describe, producing the political subjects they govern rather than merely predicting them).

[95] *Compare* Michael W. McConnell, *Textualism and the Dead Hand of the Past*, 66 GEO. WASH. L. REV. 1127, 1127 (1998) ("To whatever extent our present-day decisions are shaped or constrained by the Constitution-however interpreted-we are governed by the dead hand of the past. How can this be justified?"), *with* Lawrence B. Solum, *The Case for Originalism, Part Eight: Some Objections to the Constraint Principle*, LEGAL THEORY BLOG (2017) ("Is our constitution illegitimate because it was not ratified by a majority of living citizens? This objection raises deep questions, but in the context of contemporary constitutional practice, this objection is unlikely to be taken seriously.").

[96] *See* THE FEDERALIST No. 10 (James Madison); *see also* Letter from Thomas Jefferson to Samuel Kercheval, Thomas Jefferson's Monticello (July 12, 1816), https://tjrs.monticello.org/letter/1384 [https://perma.cc/27EJ-CYKE].

[97] *See* THE FEDERALIST No. 72 (Alexander Hamilton); *see also* Erwin Chemerinsky, *Amending the Constitution*, 96 MICH. L. REV. 1561, 1564 (1998) (reviewing David E. Kyvig, Explicit and Authentic Acts: Amending the U.S. Constitution, 1776–1995 (1996) (praising Article V for striking a balance between entrenchment and change, and noting that of more than 10,000 proposed amendments, only twenty-seven have been ratified) .

In Jefferson's 1789 letter to Madison, he proclaimed that "the earth belongs in usufruct to the living."[98] Each generation possessed sovereign rights that ancestors could not permanently constrain. Jefferson calculated that laws and constitutions should expire every nineteen years to prevent the "dead hand" of previous generations from governing the future.[99] The Constitution institutionalized these insights through specific mechanisms: elections, term limits, age requirements, succession procedures, and an amendment process requiring sustained supermajorities for constitutional change while preserving each generation's right to modify fundamental law.[100]

The amendment process was thus a procedure through which living majorities could break inherited arrangements when those arrangements had lost democratic legitimacy, and never a permanent seal on any preference. Constitutional democracy converts mortality's universal constraint into positive law. These mechanisms are mortality's institutional translations, a legal architecture through which each generation retains sovereign authority over its own governance.

F. Rejecting Death

The mechanisms the common law developed to limit posthumous control required living interpreters. Testamentary law maintains property preferences through wills and trusts, yet courts retain authority to interpret ambiguous provisions, apply changed-circumstances doctrines, and void provisions that violate public policy. Constitutional text requires ongoing judicial interpretation, its meaning permitted to evolve with changing social understanding. Legislative enactments outlast their creators but remain subject to repeal by the legislatures that follow them. The amendment process ensures that future generations retain ultimate authority to modify fundamental law through sustained deliberation. No prior mechanism

---

[98] *Letter from Thomas Jefferson to James Madison* (Sept. 6, 1789), *reprinted in* 15 Papers of Thomas Jefferson 392 (Julian P. Boyd ed., 1958).
[99] *Id.*
[100] *See* U.S. CONST. art. I, §§ 2–3; *id.* art. II, § 1; *id.* art. V.

permanently bound future generations beyond democratic consent, because none could operate without the living interpreters who applied it.[101]

That pattern holds across every stage examined in this Article. Greek magistrates classified human bodies as deserving civic burial or criminal condemnation. Roman jurists reinterpreted inherited authority to accommodate the circumstances their predecessors never faced. Medieval councils debated doctrine and bent it to new conditions. American judges applied constitutional provisions to cases their framers never anticipated. The mechanisms varied: burial rites, *patria potestas*, ecclesiastical authority, Enlightenment contracts, constitutional architecture but the structure was constant. Each required a living person at the point of decision, and each remained subject to revision precisely because that requirement could not be engineered away. Death guaranteed their revisability. What the dead left behind required the living to carry it forward, and that necessity was the outer boundary on what the dead could do.[102]

Howard Scott and Thorstein Veblen's technocracy movement of the early 1930s argued that democratic governance was simply inferior to technical administration: engineers operating through quantitative analysis, outside political contamination, could solve social problems that

---

[101] *See* Chemerinsky, *supra* note 97, at 1564; *see also* Adam M. Samaha, *Dead Hand Arguments and Constitutional Interpretation*, 108 COLUM. L. REV. 606, 613-621 (2008) (examining "dead hand" objections to constitutional authority – that the living should not be governed by choices made by long-dead generations – and arguing that theories of why the Constitution binds have weaker implications for how it should be interpreted than is commonly assumed).

[102] *See* McConnell, *supra* note 95, at 1127 ("To whatever extent our present-day decisions are shaped or constrained by the Constitution, however interpreted, we are governed by the dead hand of the past."); *see also* Samaha, *supra* note 101, at 611 (tracing how prior-generation choices bind present majorities through interpretive institutions that transform dead preferences into operative law); Frank H. Easterbrook, *Textualism and the Dead Hand*, 66 GEO. WASH. L. REV. 1119, 1119 (1998) (arguing that the living are required to give authority to inherited law, thereby limiting the dead's control).

politicians only worsened.[103] The same belief, that technical analysis stands outside politics and that algorithmic decision-making is neutral and superior to politically contaminated human judgment and animates every contemporary defense of algorithmic governance. The claim is more correct than it was in 1932. What is different now is that the infrastructure exists to make the claim self-reinforcing.[104]

Intellectual property law (generally) treats algorithms as proprietary trade secrets, shielding from citizens, regulators, and judges the criteria governing access to healthcare, credit, and employment. Institutional dependency embeds automated outputs so thoroughly into organizational workflows that dismantling them requires accepting operational disruption no accounting cycle will absorb. Recursive self-improvement removes the human from the loop that accountability presupposes.[105] As systems come to participate in the design of

---

[103] *See* HOWARD SCOTT, INTRODUCTION TO TECHNOCRACY (1933); *see also* THORSTEIN VEBLEN, THE ENGINEERS AND THE PRICE SYSTEM (1921); *see generally* Winner, *supra* note 18, at 123–24 (arguing that technical systems embed political choices while claiming the neutrality of mere instrumentality, a claim the technocracy movement pioneered and contemporary algorithmic governance repeats); Jill Lepore, The Failed Ideas That Drive Elon Musk, N.Y. TIMES (Apr. 4, 2025) (tracing Musk's program for the federal government to Scott's Technocracy Inc. and to the technocracy movement Musk's grandfather helped lead in Canada). https://www.nytimes.com/2025/04/04/opinion/elon-musk-doge-technocracy.html [https://perma.cc/P42Y-V9WS].

[104] Reuben Binns, *Human Judgment in Algorithmic Loops: Individual Justice and Automated Decision-Making*, 16 REGUL. & GOVERNANCE 197, 204 (2022) ("The demand for human involvement reflects the value placed on the social relationship of accountability"); *see also* David Singh Grewal & Jedediah Purdy, *The Original Theory of Constitutionalism*, 127 YALE L.J. 664, 683–85 (2018) (explaining that constitutional authority derives from present popular authorization, not past consent, and that the interpreter serves as the living medium through which that authorization is continuously renewed).

[105] *See* I.J. Good, *Speculations Concerning the First Ultraintelligent Machine*, *in* 6 Advances in Computers 31, 33 (Franz L. Alt & Morris Rubinoff eds., 1965) (positing that a machine capable of designing better machines would set off an "intelligence explosion" that leaves human intelligence behind); NICK BOSTROM, SUPERINTELLIGENCE: PATHS, DANGERS, STRATEGIES 62–77 (2014) (analyzing the speed at which a self-improving system could outstrip human control).

their successors, the interval between versions shrinks below the time any court, legislature, or regulator needs to deliberate. Each legal judgment then addresses a system that has already been superseded, and oversight arrives as an autopsy.

The recursion also runs through the law itself. A constraint imposed on one generation enters the next as training signal, a condition to be satisfied at the least cost to the objective. Each democratic response becomes material for the following iteration, so that compliance improves in step with capability. Democratic institutions end up inside the improvement cycle, supplying the feedback that refines the system they were meant to restrain.[106] What distinguishes this from every prior form of posthumous control in the tradition examined here is the recursive collapse. Prior dead-hand mechanisms could be reached by democratic revision because they operated through human institutions subject to it.

What Foucault described as biopower, the governance of populations through the administration of life, and what Mbembe advanced as necropolitics, the governance of populations through the administration of social death, both locate power in mechanisms that can be contested because they are operated by the living. Both presuppose an administrator: someone who can be named, confronted, and replaced. Neither framework asked what democracy confronts when the administration converts democratic confrontation into a parameter it has already learned to satisfy. Neither asked what governance looks like when the recursive collapse is complete, when the system no longer merely outlives the administrator but has internalized the democratic mechanisms designed to remove one.[107]

---

[106] *See* PASQUALE, *supra* note 56, at 6–10 (identifying proprietary opacity as the mechanism by which algorithmic systems evade democratic accountability); *see also* Catanzaro, *The Dead Law Theory*, *supra* note 30 (developing the recursive capture mechanism by which legal constraints on algorithmic systems feed back as optimization variables, transforming oversight into a parameter the system learns to satisfy on its own terms rather than a genuine external limit on its operation).

[107] *See* MICHEL FOUCAULT, THE HISTORY OF SEXUALITY, VOL. 1: AN INTRODUCTION 135–36 (Robert Hurley trans., 1978) (tracing the transition from sovereign power exercised over death to modern biopower

III. Toward the Algorithmic Death-World

A complete understanding of how algorithmic systems structurally govern requires post-structural analysis, to the operation of power through infrastructure, norm, and classification rather than command. To Foucault, the sovereign's classical power was spectacular: it manifested in execution, war, and the withdrawal of protection. Modern political power inverts this dimension. The right to take life or let live gave way to the right "to make live and to let die": the administration of populations, the optimization of bodies, the continuous regulation of biological conditions at scale.[108] Power became productive rather than prohibitive. It shaped possibility. It created subjects rather than merely constraining them.

Mbembe further refined Foucault's framework.[109] Biopower's account of making live and letting die left unexamined the populations for whom the calculus runs the other direction: those governed not into life but into conditions where life becomes unlivable; Mbembe called this the necropolitical.[110] The sovereign decides whose death is "ungrievable", whose existence belongs to the territory

---

administered through life); ACHILLE MBEMBE, NECROPOLITICS 66–92 (Steven Corcoran trans., 2019) (extending Foucault's framework to populations governed into conditions of social death). Both frameworks presuppose a living sovereign behind each governance act. Neither addresses the temporal displacement introduced when the governance act outlives its author and recursively forecloses the democratic mechanisms designed to contest it. That displacement is the analytical gap Part III addresses through the original framework of algorithmic necrocracy. *See infra* Part III.

[108] MICHEL FOUCAULT, SOCIETY MUST BE DEFENDED: LECTURES AT THE COLLÈGE DE FRANCE, 1975–76 241 (Mauro Bertani & Alessandro Fontana eds., David Macey trans., Picador 2003) (1997).

[109] *See* Achille Mbembe, *Necropolitics*, 15 PUB. CULTURE 11, 11–12 (Libby Meintjes trans., 2003) [hereinafter Mbembe, *Necropolitics Article*] (locating sovereignty in the power to dictate who may live and who must die, and asking whether biopower adequately accounts for politics waged as the destruction of persons).

[110] *Id.* at 39–40 (introducing "necropolitics" and "necropower" to describe the creation of "death-worlds," in which whole populations are subjected to conditions of life conferring on them the status of "living dead").

between living and dead.[111] These frameworks map the same terrain from different angles and presuppose the same structural condition in a living author behind every governance act. The sovereign can be named, confronted, and replaced by political means, whether violent or nonviolent.

Within the algorithmic necrocracy, however, no living sovereign issues a determination and no administrator stands behind the decision. What persists is governance without a governor; encoded preferences implementing themselves through computational infrastructure that requires no ongoing human will to continue. Foucault's biopower ends when the administrator dies. Mbembe's necropolitics ends when the sovereign falls. Algorithmic death-worlds do not end. And it is here in the dissolution between the temporal and eternal that the violence of differentiation becomes subsumed by the false veneer of algorithmic objectivity.

A. Biopolitical Sovereignty

Foucault identified a transformation in how sovereign power operates. The classical sovereign claimed the right to take life or let live: power manifested in the moment of death, in executions, in wars, in the withdrawal of protection.[112] Modern power reversed this formula. It claimed the right to make live and let die: to administer populations, optimize bodies, manage biological processes at scale.[113] The spectacular display of deadly force gave way to the continuous regulation of life. One mechanism targeted individual bodies: disciplinary institutions, schools, hospitals, military barracks, and factories, developing techniques for controlling movement, gesture, and productive capacity, creating what Foucault terms "docile bodies" capable of being subjugated, used, and improved.[114]

---

[111] *Id.* at 40; *see also* JUDITH BUTLER, FRAMES OF WAR: WHEN IS LIFE GRIEVABLE? 14–15, 22–25 (2009) (arguing that a life whose loss would not be mourned is never fully recognized as a life).

[112] FOUCAULT, *supra* note 2, at 135 ("[F]or a long time, one of the characteristic privileges of sovereign power was the right to decide life and death.").

[113] *Id.* at 136 ("One might say that the ancient right to take life or let live was replaced by a power to foster life or disallow it to the point of death.").

[114] MICHEL FOUCAULT, DISCIPLINE AND PUNISH: THE BIRTH OF THE

Another targeted populations: regulatory mechanisms managing birth rates, mortality statistics, public health, and the biological conditions of collective life.[115] Together, they constituted biopower. Governance no longer threatened death; it administered life.

The sovereign's right to kill did not disappear. It was carefully supplanted by the administration of bodies and the calculated management of life.[116] "Continuous regulatory and corrective mechanisms" replaced ritual demonstrations of deadly force.[117] Power became productive, not prohibitive. It shaped possibility and created subjects rather than containing them. Algorithmic systems are biopower's operational fulfillment.[118] Foucault's disciplinary institutions required physical enclosures: the factory wall, the hospital ward, the school building. Algorithmic biopower operates through the devices people carry voluntarily, monitoring heart rates, sleep patterns, movement, and social interactions in real time.[119] Where traditional biopolitical mechanisms tracked broad population trends, machine learning systems now construct individualized behavioral profiles from billions of data points, implementing what Rouvroy terms an "(a)normative rationality" that pre-emptively shapes possible behaviors before any legal command issues.[120]

PRISON 136–38 (Alan Sheridan trans., 1977) ("[T]he human body was entering a machinery of power that explores it, breaks it down and rearranges it.").

[115] FOUCAULT, HISTORY OF SEXUALITY, *supra* note 2, at 139 (describing "a biopolitics of the population" as the second pole of biopower, concerned with "the species body, the body imbued with the mechanics of life").

[116] *Id.* at 136.

[117] *Id.* at 144 (*quoting* Foucault's description of the shift from "the right to kill" to governance through "continuous regulatory and corrective mechanisms").

[118] *See* ZUBOFF, *supra* note 22, at 97 (arguing that surveillance capitalism is biopower's technological extension into behavioral data extraction).

[119] *See id.* at 8 (describing how personal devices enable continuous behavioral monitoring that extends disciplinary power beyond institutional walls).

[120] Antoinette Rouvroy, *The End(s) of Critique: Data Behaviourism Versus Due Process*, *in* PRIVACY, DUE PROCESS AND THE COMPUTATIONAL TURN 143, 152–53 (Mireille Hildebrandt & Katja de Vries eds., 2013).

A citizen may vote, participate in town halls, and exercise every formal democratic right. But her daily existence as a liberal subject is simultaneously shaped by opaque recommendation engines, risk assessment algorithms, and automated decision systems that operate entirely outside democratic oversight.[121] Algorithmic social credit scoring determines access to housing, education, and employment through automated assessments that reproduce historical patterns of exclusion at speeds no human oversight process can match.[122] Consider risk-prediction algorithms like Impact Pro, sold by UnitedHealth's Optum subsidiary, have been shown to systematically underestimate care needs for Black patients, implementing racial disparities through systems that claim mathematical objectivity.[123]

Frank Pasquale identified this emergent condition as a "black box" system, one that operates through proprietary algorithms that resist public scrutiny while making consequential determinations about who shall live and who

---

[121] *See* PASQUALE, *supra* note 56, at 59–100.

[122] *See* EUBANKS, *supra* note 54, at 1–23.

[123] *See* Ziad Obermeyer, Brian Powers, Christine Vogeli & Sendhil Mullainathan, *Dissecting Racial Bias in an Algorithm Used to Manage the Health of Populations*, 366 SCIENCE 447, 447–50 (2019) (finding that a widely used health algorithm developed by Optum systematically underestimated care needs for Black patients by using cost as a proxy for need); Letter from Linda A. Lacewell, Superintendent, N.Y. State Dep't of Fin. Servs., & Howard A. Zucker, Comm'r, N.Y. State Dep't of Health, to David S. Wichmann, Chief Exec. Officer, UnitedHealth Grp. Inc. (Oct. 25, 2019), https://www.dfs.ny.gov/reports_and_publications/comment_letters/dfs-doh-joint-letter-uhgi-20191025 [https://perma.cc/BV7R-XY54] (identifying the algorithm studied as Optum's Impact Pro and demanding that the company cease using it unless it could show the tool was not discriminatory); Carolyn Y. Johnson, *Racial Bias in a Medical Algorithm Favors White Patients over Sicker Black Patients*, WASH. POST (Oct. 24, 2019), https://www.washingtonpost.com/health/2019/10/24/racial-bias-medical-algorithm-favors-white-patients-over-sicker-black-patients/ [https://perma.cc/8QLC-ERKT]; Christopher Snowbeck, *Regulators Probe Racial Bias with UnitedHealth Algorithm*, MINN. STAR TRIB. (Oct. 28, 2019), https://www.startribune.com/regulators-probe-racial-bias-with-unitedhealth-algorithm/563997722 [https://perma.cc/M7F9-4JYV].

shall die.[124] These are algorithmic enclosures: computational domains that fence off human life processes, transforming shared social capacities into privately controlled territories of data extraction and automated governance.[125] Biopower no longer requires an institution with walls. It requires only a server, a sensor, and a terms-of-service agreement that no one reads.[126]

The Xinjiang surveillance architecture demonstrates where algorithmic biopower terminates.[127] Facial recognition systems at checkpoints, automated risk scoring determining freedom of movement, the Integrated Joint Operations Platform flagging individuals for detention based on algorithmic assessments of extremism risk: these mechanisms detained over one million people on the basis of automated determinations.[128] Without judicial review, due process, or democratic transparency, the algorithm's risk assessments determined who was detained.[129] And this architecture is not confined to Xinjiang. In the United States, Flock Safety operates a privately owned network of automated license plate readers that lets thousands of police departments search one another's records of residents'

---

[124] PASQUALE, *supra* note 56, at 6.

[125] *See id.* at 7–10 (describing algorithmic systems as creating "computational enclosures" analogous to historical enclosure of the commons).

[126] *See* ZUBOFF, *supra* note 22, at 11 (describing how surveillance capitalism operates through voluntary use of consumer technology rather than coercive institutional arrangements).

[127] *See* "*Eradicating Ideological Viruses": China's Campaign of Repression Against Xinjiang's Muslims*, HUM. RTS. WATCH (2018), https://www.hrw.org/report/2018/09/09/eradicating-ideological-viruses/chinas-campaign-repression-against-xinjiangs [https://perma.cc/RHN3-2YXR].

[128] *See id.*; *see also* Paul Mozur, *One Month, 500,000 Face Scans: How China Is Using A.I. to Profile a Minority*, N.Y. TIMES (Apr. 14, 2019), https://www.nytimes.com/2019/04/14/technology/china-surveillance-artificial-intelligence-racial-profiling.html [https://perma.cc/SXN3-Q4JS] (discussing China's vast use of artificial intelligence and facial recognition technology to ethnically profile and track the Uighurs, a largely Muslim minority).

[129] *See* DARREN BYLER, IN THE CAMPS: CHINA'S HIGH-TECH PENAL COLONY 1–20 (2022) (documenting how the IJOP system automated detention decisions for Uyghur populations in Xinjiang).

movements without a warrant, a practice one federal court has called "a type of indiscriminate mass surveillance."[130]

Algorithmic biopower performs the sovereign exception with added scale, speed, and opacity, and so executes beyond deliberative reach. The Founders assumed that democratic governance and debate would constrain how power administered life. They did not anticipate governance architectures that administer life faster than democracy can deliberate. Every prior form of power examined in the Western tradition, from the Athenian polis to the Roman imperial census to the Founders' constitutional design, assumed a living interpreter behind each governance act. Democratic accountability was built on that assumption that the agents of the sovereign could be named, confronted, and replaced, whether through political or revolutionary means. Algorithmic biopower eliminates this agency while leaving the administration of death intact.[131]

B. Necropolitical Sovereignty

Achille Mbembe's necropolitical framework builds upon Foucault's biopolitical commentary, showing how power determines the conditions under which life becomes unlivable, creating zones where populations exist as law's systematic

---

[130] United States v. Kyle, No. 26-CR-00189-SEH, slip op. at 34–38 (N.D. Okla. Oct. 1, 2026) (holding that a deputy's warrantless query of Flock's license plate reader network, which returned more than fifty records of the defendant's movements across the country over a month, was a search under the Fourth Amendment, and suppressing the resulting evidence); *see also* Chatrie v. United States, 146 S. Ct. 2193 (2026) (holding that police conduct a Fourth Amendment search when they obtain a person's location history from a technology company). *But see* Schmidt v. City of Norfolk, No. 2:24-cv-00621, slip op. (E.D. Va. Jan. 27, 2026), *appeal docketed*, No. 26-1227 (4th Cir. Feb. 26, 2026) (granting summary judgment to city on Fourth Amendment challenge to its Flock camera network). On the network's use beyond local policing, *see* Jason Koebler & Joseph Cox, *ICE Taps into Nationwide AI-Enabled Camera Network, Data Shows*, 404 MEDIA (May 27, 2025, 9:36 AM), https://www.404media.co/ice-taps-into-nationwide-ai-enabled-camera-network-data-shows/ [https://perma.cc/3YME-2ABG].

[131] *See* FOUCAULT, HISTORY OF SEXUALITY, *supra* note 2, at 138–40.

residual product, but not in violation of it.[132] Where biopower makes live and lets die, necropolitics exercises what Mbembe calls "control over mortality" by deciding whose life is expendable, whose death is "ungrievable", and whose existence belongs to the territory between living and dead.[133]

A healthcare algorithm that denies a claim decides who receives treatment and who does not.[134] Some of those decisions end lives, each being a necropolitical act: a sovereign judgment about whose existence the system will sustain, executed at computational speed, without deliberation.[135] Mbembe thus identifies algorithmic reason as a rationality that constructs populations through statistical modeling, sorting human beings into categories of risk, relevance, and expendability.[136] This rationality operates through what he describes as the "twofold injunction to mathematicize the world and to instrumentalize": the reduction of human existence to data, and the reduction of data to actionable classification.[137] The liberal democratic subject, once understood as an autonomous political agent capable of self-governance, gives way to a statistical profile, assessed by systems that process persons as probability distributions rather than citizens.

---

[132] *See* Mbembe, *Necropolitics Article*, *supra* note 109, at 40 ("I have put forward the notion of necropolitics and necropower to account for the various ways in which, in our contemporary world, weapons are deployed in the interest of maximum destruction of persons and the creation of death-worlds, new and unique forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of living dead.").

[133] Mbembe, *Necropolitics Article, supra* note 109, at 12.

[134] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 66 ("Under conditions of necropower, the lines between resistance and suicide, sacrifice and redemption, martyrdom and freedom are blurred.").

[135] *See also* EUBANKS, *supra* note 54, at 39–44 (recounting how Indiana's automated welfare-eligibility system terminated benefits, including Medicaid coverage for medically vulnerable recipients).

[136] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 109–10 (citing Matteo Pasquinelli, Anomaly, Detection: The Mathematization of the Abnormal in Metadata Society, panel talk presented at Transmediale, Berlin (2015)).

[137] ACHILLE MBEMBE, BRUTALISM 73–74 (Steven Corcoran trans., 2024).

As automation standardizes classification, human experience is commodified as fungible and structured data.[138] Democratic governance depends on shared frameworks for establishing facts, deliberating about values, and contesting power through reason.[139] Algorithmic governance replaces deliberation with stochastic indeterminacy. Markets themselves become algorithmic structures; knowledge becomes useful only insofar as it is quantifiable; truth becomes a function of pattern recognition rather than argument.[140] Citizens inhabit personalized information environments optimized for engagement, not for democratic participation. The epistemic commons fractures. Each user receives a different version of reality, customized by systems whose criteria are proprietary and unaccountable.[141]

Necropolitical power achieves its concrete expression in what Mbembe terms "death-worlds": spaces where populations exist in conditions of social death, subjected to the status of the living dead.[142] These administrative categories are produced by systems that determine whose claims on resources, movement, and civic life will be honored and whose will be denied. Consider Amazon's warehouse productivity algorithms which track worker output against statistical

---

[138] *See id.* at 73.

[139] *See generally* JÜRGEN HABERMAS, BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY 107–31 (William Rehg trans., 1996).

[140] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 109 ("Since markets themselves are incredibly turning into algorithmic structures and technologies, the only useful knowledge today is supposed to be algorithmic.").

[141] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 110 ("Democracy has no future in a factless world or in a world without evidence, that is, accountability."); *see generally* ELI PARISER, THE FILTER BUBBLE: WHAT THE INTERNET IS HIDING FROM YOU 1–20 (2011) (arguing that pervasive online personalization is reshaping how individuals encounter information, significantly affecting democracy and society); Jill Lepore, The Artificial State, NEW YORKER (Nov. 4, 2024) (tracing the automation of political campaigning and public discourse from the 1960s to algorithmic social media) https://www.newyorker.com/magazine/2024/11/11/the-artificial-state [https://perma.cc/M9MC-VAK9].

[142] MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 92.

thresholds generated from aggregate performance data.[143] Workers who fall below the threshold receive automated warnings, and sustained deviation triggers automatic termination, without supervisory review. The worker does not fail to meet a human standard; she fails to satisfy a model whose criteria are proprietary. Her only appeal is to an algorithm in structuring her conduct to the gamified parameters of the system.[144] This is a death-world; an administrative erasure, the reduction of a working life to a data point that falls outside the acceptable stochastic mean.

Predictive healthcare algorithms likewise determine treatment access based on cost-effectiveness modeling rather than clinical judgment.[145] Under these models, the patient is denied care not by a physician exercising judgment but by a model that has classified her as a poor actuarial risk. Cigna's PxDx system, for example, processes in an average of 1.2 seconds, without any physician reviewing the file.[146] These are necropolitical determinations, where the algorithm decides whether the patient receives care, because the system tracks denials rather than outcomes, it never registers whether a given decision resulted in death.

China's Social Credit System and recent American

---

[143] *See* Steven P. Vallas & Anne-Kathrin Kronberg, *Coercion, Consent, and Class Consciousness: How Workers Respond to Amazon's Production Regime*, 9 Socius 9 (2023).

[144] *See id.* ("The company uses digital surveillance to undergird its coercive practices, generating greater alienation, which in turn translates into a more oppositional view of management."); *see also* Colin Lecher, *How Amazon Automatically Tracks and Fires Warehouse Workers for 'Productivity,'* The Verge (Apr. 25, 2019) https://www.theverge.com/2019/4/25/18516004/amazon-warehouse-fulfillment-centers-productivity-firing-terminations [https://perma.cc/QZZ5-YGDL] (reporting that, according to a letter from Amazon's counsel, the company's system "automatically generates any warnings or terminations regarding quality of productivity without input from supervisors").

[145] *See* EUBANKS, *supra* note 54, at 168–73.

[146] *See* Susanna Fog Breen & Patrick Rucker, *How Cigna Saves Millions by Having Its Doctors Reject Claims Without Reading Them*, PROPUBLICA (Mar. 25, 2023), https://www.propublica.org/article/cigna-pxdx-medical-health-insurance-rejection-claims [https://perma.cc/H52F-MC8B].

adaptations of the same operate through the same necropolitical logic.[147] Automated scoring determines access to transportation, employment, education, and financial services. Citizens barred from air and train travel are not imprisoned, rather, they are subjected to social death, and are removed from the infrastructure of modern social participation. They exist but cannot move, and their social existence having been extinguishes, become the living dead.[148]

For over a quarter century, American companies including IBM, Oracle, Cisco, Microsoft, Dell, and HP have sold technology to the Chinese police-state and surveillance entities despite repeated warnings from Congress and the press that these tools enabled human rights abuses.[149] IBM worked with Chinese defense contractor Huadi to design the Golden Shield: the main policing system for censoring the internet and tracking dissidents. Geographic and mapping software from IBM, Oracle, HP, and Esri enables Chinese police to detect when blacklisted Uyghurs, Tibetans, or dissidents stray from designated provinces.[150]

---

[147] *See* Jeremy Daum, *China's Social Credit System, Explained*, MIT TECH. REV. (Apr. 23, 2019); *see also* Samantha Bradshaw & Philip N. Howard, *The Global Disinformation Order: 2019 Global Inventory of Organised Social Media Manipulation*, OXFORD INTERNET INST. (2019) (documenting organized social media manipulation campaigns in seventy countries and identifying China as "a major player in the global disinformation order"); *see also* Genia Kostka, *China's Social Credit Systems and Public Opinion: Explaining High Levels of Approval*, 22 NEW MEDIA & SOC'Y 1565, 1566–70 (2019) (finding, in a cross-regional survey, unexpectedly high public approval of social credit systems, with the strongest support among wealthier, better-educated, and urban respondents).

[148] MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 92.

[149] Kang & Grauer, *supra* note 51. Of course, not only American companies sell surveillance technologies to the Chinese police-state. *See, e.g.*, Mara Hvistendahl, *Chinese Police Kept Buying Cellebrite Phone Crackers After Company Said It Ended Sales*, THE INTERCEPT (Aug. 26, 2021), https://theintercept.com/2021/08/26/cellebrite-china-cellphone-hack/ [https://perma.cc/2HRQ-HPBY] (reporting that Chinese police continued to acquire phone-extraction devices made by the Israeli firm Cellebrite through resellers after the company's announced 2020 withdrawal from China).

[150] *See* Dake Kang & Yael Grauer, *US Tech Companies Enabled the Surveillance and Detention of Hundreds of Thousands in China*,

These systems collectively create necropolitical zones through the routine operation of automated governance.[151] The algorithmic death-world is a credit score, a denial code, or some statistical threshold someone below the median or outside the mean will inevitably fail to clear.[152] Necropolitical power thus reaches its terminal form in what Mbembe describes as the collapse of distinctions between simulation and reality within algorithmic governance systems.[153] As machine learning increasingly bases decisions on probabilistic reasoning, necropolitical control operates through what Mbembe identifies as environments where "science turns to fiction and fiction into the real."[154] These systems generate hyperreal conditions where algorithmic prediction becomes indistinguishable from reality itself, creating self-referential computational domains that construct rather than merely respond to social phenomena.[155] Baudrillard's hyperreality

---

ASSOCIATED PRESS (Sept. 9, 2025) (reporting that IBM, Oracle, Cisco, Microsoft, Dell, HP, and others sold billions of dollars of technology to Chinese police and surveillance entities over more than two decades, with IBM working with Chinese defense contractor Huadi to design the Golden Shield and geographic software from IBM, Oracle, HP, and Esri enabling police to track blacklisted Uyghurs and dissidents, based on tens of thousands of leaked emails and confidential corporate documents); *see also* Mozur, *supra* note 128 (documenting Chinese AI companies deploying facial recognition systems to racially profile Uyghurs in Xinjiang).

[151] *See generally* GIORGIO AGAMBEN, STATE OF EXCEPTION (Kevin Attell trans., 2005) (developing the concept of the state of exception as a permanent structural feature of modern governance).

[152] *See* EUBANKS, *supra* note 54, at 11–12 (describing how automated systems create "digital poorhouses" that systematically exclude the poor from social participation through algorithmic classification).

[153] *See* Leonard D'Cruz, *What Demarcates Necropolitics from Biopolitics? A Foucauldian Critique of Mbembe*, THEORY, CULTURE & SOC'Y (2025) (arguing Mbembe's treatment of algorithmic power remains instrumental rather than addressing the temporal dimension of posthumous governance).

[154] *See* JEAN BAUDRILLARD, SIMULACRA AND SIMULATION 29 (Sheila Glaser trans., 1994) ("Such is the watershed of the hyperreal sociality, in which the real is confused with the model, as in the statistical operation, or with the medium . . . .").

[155] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 108 ("[S]cience's having turned into fiction and fiction into the real—all of which has led to a profound destabilization of what, not so long ago, counted as the ground for knowledge and, by extension, power and accountability. After all, the fact

manifests in recommendation systems that shape human preferences.[156] Netflix determines what users see.[157] TikTok constructs what users want. The algorithm distributes content; content creates preference; and preference confirms the algorithm.[158]

Where constitutional democracy assumed death served as a natural limit on political power, these systems generate mechanisms for perpetual control that transcend that assumption.[159] A sovereign can be identified, indicted, and replaced but the algorithm cannot. Mbembe's framework anticipates that asymmetry without theorizing it because he does not address the temporal dimension that distinguishes algorithmic governance from the necropolitical power he described. His sovereign decides who lives and who dies now,

---

is that today there is hardly any consensus concerning what constitutes reality and how to access it. In the absence of such a consensus, all that we are left with is ontological differences.").

[156] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 126–27 ("Once operational, the Necrocracy becomes self-referential, creating a feedback loop that gradually divorces decision-making from contemporary human input.").

[157] *See* Cathryn van Kessel, Jason D. Manriquez & Kip Kline, *Baudrillard, Hyperreality, and the 'Problematic' of (Mis/Dis)information in Social Media*, THEORY & RSCH. IN SOC. EDUC. (2024) ("Baudrillard challenged us to instead accept that our ontological status is now an extension of media itself, no longer real, but hyperreal in its rejection of the signifier/signified of the posthumous economic (capitalist) mode of production for the symbolic exchange of the social relation with its 'uninterrupted cycle of giving and receiving.'").

[158] *See generally* Manon Bischoff, *How Recommendation Algorithms Work—And Why They May Miss the Mark*, SCI. AM. (Aug. 17, 2023), https://www.scientificamerican.com/article/how-recommendation-algorithms-work-and-why-they-may-miss-the-mark [https://perma.cc/EA2M-YWPN] (explaining how platforms like Netflix use their algorithms and user data to push recommendations to users); BAUDRILLARD, SIMULACRA AND SIMULATION, *supra* note 154, at 29 ("[A] switch from the panoptic mechanism of surveillance . . . to a system of deterrence, in which the distinction between the passive and the active is abolished.").

[159] *See* Nathan van Camp, *From Biopower to Psychopower: Bernard Stiegler's Pharmacology of Mnemotechnologies*, CTHEORY (2012) ("It can support the emancipation and edification of the mind, but it can also be used to control the mind and keep it in a state of docility.").

whereas the algorithm was written by someone who may be dead: its modeling weights and assumptions set by engineers whose employment ended years ago, by executives who have since departed, and by regulatory choices made in political conditions that no longer exist. This is the algorithmic death-world.[160]

C. Algorithmic Death-Worlds

These frameworks do not advance in stages, each displacing the last. They operate as layers.[161] Biopower persists in every system that sorts a population by risk score, calibrates access to housing and employment through automated determination, or monitors behavioral compliance in real time executes the logic Foucault identified, by making live and letting die, administering bodies at the granularity he identified as characteristic of modern power. Necropolitics persists in every healthcare denial, warehouse termination, and Social Credit exclusion is a determination about whose continuation of life the system will sustain, executed computationally rather than through sovereign command, but necropolitical nonetheless. Neither framework, however, captures the temporal demarcations of power through and beyond the function of death. Foucault's biopolitical administrator and Mbembe's necropolitical sovereign share a common premise: a living interpreter behind each governance act. The algorithm has no such endpoint, when the designer dies, the criteria persist, and when the sovereign is replaced, the encoded preference executes beyond the temporal limitations of the polity.

Singularity proponents promise digital immortality: human consciousness uploaded into computational substrates,

---

[160] *See* Mbembe, *Necropolitics Article*, *supra* note 109, at 12.

[161] *See generally* FOUCAULT, HISTORY OF SEXUALITY, *supra* note 2 (explaining the formula of modern power to "make live and let die," distinguishing it from classical sovereign right to kill); *see also* Mbembe, *Necropolitics Article, supra* note 109 (explaining how necropolitics exercises "control over mortality" through determinations of whose life is expendable). The argument that algorithmic governance adds a temporal dimension neither framework accounts for is the original contribution developed in Section III.C.

biological death rendered a technical inconvenience.[162] Critics dismiss this as pseudoscience, "essentially those of a new age religion."[163] Both miss the point because the singularity need not arrive for its infrastructure to operate. Facebook's recommendation algorithms already preserve its creators' decision-making patterns beyond biological death, shaping billions of users' information environments according to encoded value systems that resist democratic modification.[164] Cigna's PxDx system automates life-and-death determinations at computational speed. Google's predictive architectures already maintain knowledge hierarchies designed by engineers who will not live to see what those hierarchies produce. The infrastructure is already operational and conflicts with a principle the Founders took as self-evident: that the earth belongs to the living.[165] Elon Musk has remarked humanoid

---

[162] *See* David J. Chalmers, *The Singularity: A Philosophical Analysis*, 17 J. CONSCIOUSNESS STUD. 7, 25–26 (2010) (analyzing whether computational preservation of human cognition constitutes genuine survival).

[163] Salvinija Roznyte, *Kurzweil's Theories on Technological Singularity*, LONGEVITY TECH. (2019), https://longevity.technology/news/kurzweils-theories-on-technological-singularity-longevity-in-the-cloud [https://perma.cc/RQN9-N794].

[164] *See* Klonick, *supra* note 93, at 1648–49 (documenting how Facebook's content governance systems encode normative frameworks that subsequent engineers inherit rather than design); *see also* Karen Hao, *How Facebook Got Addicted to Spreading Misinformation*, MIT TECH. REV. (Mar. 11, 2021), https://www.technologyreview.com/2021/03/11/1020600/facebook-responsible-ai-misinformation [https://perma.cc/3M45-YYM3] (reporting that Facebook's internal tool FBLearner Flow enabled engineers to deploy machine learning models into the recommendation system beginning in 2016, producing layered decision-making architectures that no single team controls); Narayanan, *supra* note 93 (explaining that platform companies have disclosed almost nothing about the effects of their algorithms). On algorithmic resistance to democratic oversight, *see* Kuziemski & Misuraca, *supra* note 28, at 3–4. Meta recently patented a system for simulating deceased users' social media activity through large language models trained on their historical data. *See* Sydney Bradley, *Death Isn't the End: Meta Patented an AI That Lets You Keep Posting from Beyond the Grave*, BUS. INSIDER (Feb. 11, 2026), https://www.businessinsider.com/meta-granted-patent-for-ai-llm-bot-dead-paused-accounts-2026-2 [https://perma.cc/BDH4-XWBW].

[165] *See* Letter from Thomas Jefferson to James Madison, *supra* note 92 ("I set out on this ground, which I suppose to be self-evident, 'that the earth

robots and deep intelligence would soon produce "quasi-infinite products and services" and that money might cease to be meaningful. (what economists call post-scarcity). On that vision, the governed population would thus become economically superfluous.[166]

In *Necropolitics*, Mbembe identifies this "algorithmic reason" as a rationality that constructs populations "via statistics, modeling, and mathematics."[167] In *Brutalism*, he goes further: "the world has, so to speak, become a curve, a circle, a diagram, an algorithm."[168] He describes what necropolitical power does to populations through algorithmic tools.[169] The

---

belongs in usufruct to the living': that the dead have neither powers nor rights over it."); *see also supra* Section II.E (tracing how Madison, Hamilton, and Jefferson treated generational turnover as democracy's essential resource, and how the Constitution institutionalized it through elections, term limits, and the amendment process).

[166] *See* Chalmers, *supra* note 162, at 25–26 ("Under human-based AI, each system is either an extended human or an emulation of a human. The resulting systems are likely to have the same basic values as their human sources. There may be differences in nonbasic values due to differences in their circumstances. . . . These differences will be magnified if designers create multiple emulations of a single human, or if they choose to tweak the values of an emulation after setting it up."); *see also* Sajila Saseendran, *WGS 2025: Elon Musk asks US to 'delete all agencies, mind its own business,'* GULF NEWS (Feb. 13, 2025) (quoting Musk's recent remarks anticipating an economic order in which biological labor participation is superfluous, dissolving the Hobbesian social covenant analyzed above: "Once you have humanoid robots and deep intelligence, you can basically have quasi-infinite products and services available. . . . I'm not sure at that point if money will even be meaningful. . . . You'll have a sort of universal high-income situation.").

[167] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 109–10 (citing Matteo Pasquinelli, Anomaly, Detection: The Mathematization of the Abnormal in Metadata Society, panel talk presented at Transmediale, Berlin (2015)); *see also* Tarcízio Silva, *Algorithmic Necropolitics*, SEXUALIDAD, SALUD Y SOCIEDAD, no. 39, e22304, at 2–28 (2023) (demonstrating racism encoded in AI through predictive systems, facial recognition, and risk scores).

[168] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11; *see also* David Beer, *Brutalism*, INFO., COMM'N & SOC'Y (2025) (proposing "algorithmic brutalism" and identifying the "inevitable tension" between Mbembe's panoramic theory and "the microscopic specificities of systems, codings, models, data and their social lives").

[169] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11.

algorithmic death-world persists beyond the biological death of those who designed it, foreclosing democratic revision by populations who never consented to its operation.[170] The algorithmic death-world operates across generations, encoding preferences that constrain citizens not yet born.[171] Mbembe identifies algorithmic reason as a tool of necropolitical power but the tool has become the sovereign.[172] Algorithmic governance supplants necropolitics.[173]

The singularity accelerates these mechanisms to their

---

[170] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 117 (arguing modern reforms weakening the Rule Against Perpetuities failed to anticipate "technologically embodied intentionality persisting beyond death"); *see also* Aurélie Halsband, *Sustainable AI and Intergenerational Justice*, 14 SUSTAINABILITY 3922, at 1–11 (2022) (developing a framework for normative issues of intergenerational justice raised by AI).

[171] *See* Dennis F. Thompson, *Representing Future Generations: Political Presentism and Democratic Trusteeship*, 13 CRITICAL REV. INT'L SOC. & POL. PHIL. 17, 19–20 (2010) (defining "presentism" as democracy's systematic bias favoring present over future generations); *see also* Samaha, *supra* note 101, at 610–12 (analyzing dead hand arguments and noting technological change as a driver).

[172] D'Cruz, *supra* note 153 (arguing Mbembe's "death-worlds" concept genuinely extends beyond Foucault but that his treatment of algorithmic power remains instrumental).

[173] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 125–27; *see also* John Danaher, *The Threat of Algocracy: Reality, Resistance and Accommodation*, 29 PHIL. & TECH. 245, 250–52 (2016) (arguing algorithmic governance renders decision-making opaque to democratic oversight). *Compare* SCHMITT, *supra* note 17, at 5 ("Sovereign is he who decides on the exception."), *with* Peter Thiel, *The Straussian Moment*, *in* POLITICS AND APOCALYPSE 189, 202 (Robert Hamerton-Kelly ed., 2007) (identifying Schmitt as among the thinkers who "dominate political science" post-9/11 and endorsing authority operating "outside the checks and balances of representative democracy"); *see also* Harrison Smith & Roger Burrows, *Software, Sovereignty and the Post-Neoliberal Politics of Exit*, 38 THEORY, CULTURE & SOC'Y 143, 155–56 (2021) (arguing that neoreactionary digital architecture instantiates "architectures of exit" designed to encode sovereign governance in code resistant to democratic revision). Algorithmic systems instantiate Schmitt's exception doctrine at the level of individual transactions: Cigna's PxDx system, Amazon's termination algorithm, and predictive policing models each decide the exception at industrial scale, without deliberation or appeal. Sovereignty migrates from democratic institutions into computational infrastructure; who controls the algorithm is who is sovereign.

logical conclusion. Contemporary algorithms preserve specific decision-making frameworks; the singularity promises wholesale preservation of human cognitive capacity.[174] The endpoint extends what current systems already achieve, differing only in comprehensiveness and irreversibility.[175] Once human cognition achieves digital instantiation, the constitutional principle that death limits political authority faces categorical elimination. The living inherit entire preserved cognitive architectures, not specific algorithms, executed through computational processes designed to resist modification across indefinite temporal horizons.

D. Algorithmic Persistence

Sophisticated probabilistic systems now model human decision-making through vast repositories of behavioral data.[176] As surveillance capitalism monitors, the model learns; as it learns, it reconstructs human value systems through automated cognition and thereby extends intentionality beyond death.[177]Where preserved intentions once demanded continuous human interpretation, these systems autonomously implement and adapt preserved human agency, establishing an "(a)normative rationality founded on the automated collection, aggregation and analysis of big data so as to model, anticipate and pre-emptively affect possible behaviors."[178]

---

[174] Chalmers, *supra* note 162, at 25–26.

[175] *See* Matej Avbelj, *Reconceptualizing Constitutionalism in the AI Run Algorithmic Society*, 25 GERMAN L.J. 1081, 1085–87 (2024) (arguing AI has created an "epistemic gap in constitutional theory" and that conventional sovereignty theories are obsolete in the face of algorithmic "functional sovereigns").

[176] *See* Luciana Parisi, *Critical Computation: Digital Automata and General Artificial Thinking*, 36 THEORY, CULTURE & SOC'Y 89, 92 (2019) ("Non-conscious forms of automated cognition can solve complex problems without using formal languages or inferential deductive reasoning, and without the need of consciousness.").

[177] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 121.

[178] Antoinette Rouvroy & Thomas Berns, *Algorithmic Governmentality and Prospects of Emancipation*, 177 RÉSEAUX 163, 167 (2013); *see also* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 121 (citing Shoshana Zuboff, Big Other: Surveillance Capitalism and the Prospects of an Information Civilization, 30 J. INFO. TECH. 75 (2015)).

OpenAI's GPT models statistically model human linguistic patterns and associated value systems through vast datasets of human-generated text.[179] The models generate novel outputs based on learned patterns, implementing posthumous agency that evolves beyond its initial training.[180] Google's predictive search algorithms preserve knowledge architectures designed by their creators while continuously adapting to new inputs, maintaining intentional structures that evolve beyond direct human control.[181] These systems accumulate "hidden technical debt": components so entangled that changing any element changes the behavior of the whole.[182] The entanglement compounds over time. Machine learning architectures create a new species of regulation: code that constrains behavior as effectively as law, without law's deliberative origins or democratic accountability.[183]

Through continuous learning and adaptation, these systems establish technical individuation, a dynamic evolution that maintains core patterns of preserved human intention while adapting to new conditions.[184] Madison and Jefferson understood mortality as enabling political renewal, and

---

[179] *See How ChatGPT and Our Foundation Models Are Developed*, OPENAI, https://openai.com/index/how-chatgpt-and-our-foundation-models-are-developed [https://perma.cc/M52V-GTMN].

[180] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 113 (citing Andy Clark & David Chalmers, The Extended Mind, 58 Analysis 7, 11–12 (1998)).

[181] *See* Luciana Parisi, *Instrumental Reason, Algorithmic Capitalism, and the Incomputable*, *in* ALLEYS OF YOUR MIND: AUGMENTED INTELLIGENCE AND ITS TRAUMAS 125, 129–31 (Matteo Pasquinelli ed., 2015).

[182] D. Sculley et al., *Hidden Technical Debt in Machine Learning Systems*, 28 ADVANCES IN NEURAL INFO. PROCESSING SYS. 2503, 2505 (2015) (documenting how ML systems develop entanglement where "changing anything changes everything").

[183] *See generally* LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 6 (1999) ("Code is law."); *see also* Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553, 587-593 (1998) (arguing that technological capabilities and system design choice impose rules on network participants, forming a "Lex Informatic" that operates alongside law as a source of information policy).

[184] *See* Ben Roberts, *Technics, Individuation and Tertiary Memory: Bernard Stiegler's Challenge to Media Theory*, 77 NEW FORMATIONS 12–13 (2012).

algorithmic systems undermine that understanding. Content moderation systems like Facebook's Fairness Flow continue determining permissible speech long after original programmers have departed or died.[185] Algorithmic trading systems continue implementing investment strategies of deceased financial analysts through automated execution.[186] Where constitutional democracy institutionalizes death's disruptive power as a mechanism for generational renewal, algorithmic persistence enables posthumous control that resists democratic adaptation.[187]

E. Algorithmic Temporality

Democratic legitimacy depends on temporal distinctions that algorithmic governance systematically destroys. Past decisions are supposed to be past: subject to revision, contestation, and democratic repudiation by living citizens encountering new circumstances. Present determinations are supposed to be *present* (in both a temporal and embodied sense): arrived at through deliberation, transparent in their criteria, and open to contestation before they bind. Future conditions are supposed to be genuinely open: available for political choice rather than predetermined by statistical extrapolation from prior states. Algorithmic governance collapses all three: first, past training data determines present classifications; then, present classifications begin to generate future outcomes; finally, future outcomes confirm the original model. The sequence is recursive, not chronological: a loop that renders the distinction between past, present, and future operationally meaningless. Jefferson argued that democratic laws and constitutions should expire every nineteen years to prevent past generations from eternally binding present ones. Algorithmic systems operate on nineteen-millisecond cycles.

---

[185] *Cf. How We're Using Fairness Flow to Help Build AI That Works Better for Everyone*, META (2021), https://ai.meta.com/blog/how-were-using-fairness-flow-to-help-build-ai-that-works-better-for-everyone [https://perma.cc/PAC5-FFNV] (describing Fairness Flow as "a technical toolkit that enables our teams to analyze how some types of AI models and labels perform across different groups").

[186] *See* Parisi, *Instrumental Reason, supra* note 181.

[187] *See infra* Part IV.

The dead hand encodes faster than democratic renewal can respond.

If the algorithm encodes 2020 preferences into 2030 social conditions, the 2030 citizen is not merely governed by a dead hand but constituted by it. Her sense of what is politically possible has been shaped by criteria she did not set, cannot identify, and cannot contest because she does not know they are operating. The algorithmic feedback loop documented by Gauthier et al. confirms the mechanism empirically: political opinion shifted toward positions the algorithm amplified, and returning users to a chronologically sorted social media feed did not reverse the shift.[188] Where Jefferson identified a problem of governance, the algorithmic necrocracy produces a problem of personhood. The governed subject is not merely constrained by the encoded preferences of a prior generation but has been made, in part, by them.

Algorithmic predictions thus come to reshape social conditions, and the decision influences the outcome the prediction forecasted.[189] Zuboff calls this "instrumentarian power": the shaping of conduct through persistent surveillance and predictive control.[190] Consider TikTok's algorithm

---

[188] Germain Gauthier, Roland Hodler, Philine Widmer & Ekaterina Zhuravskaya, *The Political Effects of X's Feed Algorithm*, 652 NATURE 416 (2026) (conducting randomized field experiment of 4,965 active U.S. X users and finding that algorithmic feed exposure shifted political opinion toward conservative positions and that reverting users to a chronological feed did not reverse those shifts).

[189] *See* Juan C. Perdomo, Tijana Zrnic, Celestine Mendler-Dünner & Moritz Hardt, *Performative Prediction*, 119 PROC. OF THE 37TH INT'L CONF. ON MACHINE LEARNING 7599, 7600 (2020) (formalizing how "predictions support decisions [that] may influence the outcome they aim to predict"); *see also* Lucas D. Introna, *Algorithms, Governance, and Governmentality: On Governing Academic Writing*, 41 SCI., TECH., & HUM. VALUES 17, 19–21 (2016) (demonstrating algorithms "enact particular forms of subjectivities"); *see also* Gauthier et al., *supra* note 188 (establishing empirical "algorithmic path dependence" and demonstrating that the dead hand holds even after release); *see generally* Jill Lepore, *If Then: How the Simulmatics Corporation Invented the Future* (2020) (recounting a company founded in 1959 that used computers to predict and influence behavior for a presidential campaign and the Department of Defense).

[190] *See* Tuomo Tiisala, SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER

constructs user preferences, distributing content according to computational determinations that create what users come to want.[191] Or how Waze redirects physical movement through computational mediation, remaking the territory to match the map.[192] Predictive policing makes the mechanism visible. PredPol (now Geolitica) directs police to algorithmically designated locations, where increased enforcement generates arrests, which circularly validate the initial predictions, which in turn cause new predictions to intensify enforcement.[193]

Researchers have proved mathematically that this feedback loop causes predictions to diverge from actual crime rates.[194] Using Oakland drug crime data, Lum and Isaac demonstrated

---

OF POWER, 1 J. SOC. & POL. PHIL. 1, 3–4 (2022) (reviewing SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER (2019)).

[191] Casey Newton, *The Leader of the Time Well Spent Movement Has a New Crusade*, THE VERGE (Apr. 24, 2019), https://www.theverge.com/interface/2019/4/24/18513450/tristan-harris-downgrading-center-humane-tech [https://perma.cc/GR8M-AYSZ] (quoting Tristan Harris describing "a historical moment when a species that is intelligent builds technology that . . . can simulate a puppet version of its creator, and the puppet can control the master").

[192] *See* Joseph Stromberg, *Is GPS Ruining Our Ability to Navigate for Ourselves?*, VOX (Sept. 2, 2015), https://www.vox.com/2015/9/2/9242049/gps-maps-navigation [https://perma.cc/JA4U-5X7V].

[193] *See generally* Danielle Ensign, Sorelle A. Friedler, Scott Neville, Carlos Scheidegger & Suresh Venkatasubramanian, *Runaway Feedback Loops in Predictive Policing*, 81 PROCEEDINGS OF MACH. LEARNING RES. 1, 1–12 (2018); *see also* Yuval Abraham, *'Lavender': The AI Machine Directing Israel's Bombing Spree in Gaza*, +972 MAG. (Apr. 3, 2024), https://www.972mag.com/lavender-ai-israeli-army-gaza [https://perma.cc/4H8B-MMYV] (reporting that Israel's Lavender AI system marked approximately 37,000 Palestinians as suspected militants for potential assassination, with human reviewers spending as little as twenty seconds per target before approving strikes, demonstrating that algorithmic prediction does not merely direct enforcement: it constitutes the targeting decision, collapsing the distinction between prediction and lethal determination).

[194] *Ensign et al.*, *supra* note 193, at 6–8; *see also* SARAH BRAYNE, PREDICT AND SURVEIL: DATA, DISCRETION, AND THE FUTURE OF POLICING 43–47 (2020) (showing predictive models "not only predict events . . . they also actually contribute to those events' future occurrence").

that drug use is evenly distributed across populations, but PredPol concentrates policing in Black and Latino neighborhoods. But these models predict future policing, not future crime.[195] Consider how credit scoring operates through the same logic. A person flagged as high-risk loses access to affordable credit, so she turns to payday lenders, and becomes the poor risk the algorithm predicted. The prophecy fulfills itself, and the system learns nothing from the error because the error confirms the model.[196]

Dark patterns make the intentional structure visible: interface designs that steer users toward choices beneficial to designers encode the designer's preference as the user's apparent decision.[197] But where dark patterns manipulate through interface friction, algorithmic feedback loops operate below the threshold of interaction altogether. No one clicks "accept", and no dialogue box appears; the prediction generates the enforcement generates the data, which generates the training data that models the prediction. Dark patterns require a living subject who can be deceived. Algorithmic feedback loops require only electricity.

Stochastic epistemology thus operates through algorithmic prediction that constructs the reality it claims to forecast.[198]

---

[195] Kristian Lum & William Isaac, *To Predict and Serve?*, 13 SIGNIFICANCE 14, 16–17 (2016); *see also* Rashida Richardson, Jason M. Schultz & Kate Crawford, *Dirty Data, Bad Predictions: How Civil Rights Violations Impact Police Data, Predictive Policing Systems, and Justice*, 94 N.Y.U. L. REV. ONLINE 192, 196–98 (2019) (finding that in nine of thirteen jurisdictions studied, predictive policing systems were or could have been informed by "dirty data" generated during periods of documented unlawful, biased, or corrupt policing).

[196] *See* CATHY O'NEIL, WEAPONS OF MATH DESTRUCTION 141–44 (2016) (documenting credit scoring as "self-fulfilling prophecies, lacking any meaningful way to learn from the mistakes that they make"); *see also* O.C. King & M. Mertens, *Self-Fulfilling Prophecy in Practical and Automated Prediction*, 26 ETHICAL THEORY & MORAL PRAC. 1, 4–7 (2023) (explaining that as these self-fulfilling predictions comes true, the errors that produce them go unnoticed, such that neither human nor automated predictors receive a signal to course correct).

[197] Gregory M. Dickinson, *Privately Policing Dark Patterns*, 57 GA. L. REV. 1633, 1637–42 (2023).

[198] *See also* Sophia Maalsen, *Algorithmic Epistemologies and*

Traditionally, sovereign power operated through regimes of truth requiring human interpretation. Algorithmic systems bypass interpretation entirely, creating reality through statistical correlation and pattern recognition. Google's Knowledge Graph constructs relationships between concepts through algorithmic assessment of relevance.[199] Wikipedia's automated editing bots implement encoded standards of knowledge production that shape what information becomes accessible and credible.[200] Rouvroy and Stiegler identified the result as a "digital regime of truth" that bypasses the deliberative processes democratic governance requires.[201] This regime irreversibly reduces the possible to the probable, eliminating the space for genuinely political action by preempting it computationally.[202] A 2026 randomized study of

---

Methodologies, 47 PROGRESS HUM. GEOGRAPHY 478, 480–82 (2023) (proposing "algorithmic epistemology" in which human and algorithmic agency unite to produce new knowledge). *See generally* Dietger Heitele, *An Epistemological View on Fundamental Stochastic Ideas*, 6 EDUC. STUD. MATHEMATICS 187, 189–91 (1975) (arguing that teaching stochastic processes should reflect the experience and reality of the student with a concentration on the fundamental ideas to encourage the development of intuition and the end of spiraled curriculum) .

[199] *See* Ciyuan Peng, Feng Xia, Mehdi Naseriparsa & Francesco Osborne, *Knowledge Graphs: Opportunities and Challenges*, 56 A.I. REV. 13071, 13073–74 (2023).

[200] *See id.*

[201] *See* Antoinette Rouvroy & Bernard Stiegler, *The Digital Regime of Truth: From the Algorithmic Governmenta New Rule of Law*, 3 LA DELEUZIANA 6, 7–8 (2016); *see also* Richard Weiskopf & Hans Kause Hansen, *Algorithmic Governmentality and the Space of Ethics: Examples from "People Analytics,"* 76 HUM. REL. 483, 497-500 (2023) (arguing that algorithmic governmentality reshapes the space for ethical reflection through mechanisms of closure–automated decision-making, black-boxing, and the circumvention of human reflexivity–while leaving openings for contestation and resistance).

[202] *See* Rouvroy & Stiegler, *supra* note 201; *see also* Antoinette Rouvroy, *Algorithmic Governmentality and the Death of Politics*, GREEN EUR. J. (2020) (arguing that algorithmic governmentality acts "pre-emptively on effects" rather than on causes, producing an "evacuation of the subject" that amounts to "the death of politics"); Claudia Aradau, *Algorithmic Governmentality: Questions of Method*, *in* HANDBOOK ON GOVERNMENTALITY 341–45 (William Walters & Martina Tazzioli eds., 2023) (examining algorithmic governmentality as an analytic of power and

4,965 active X users found that algorithmic feed exposure shifted political opinion toward conservative positions. Returning users to a chronological feed did not reverse those shifts.[203] Baudrillard's theory of hyperreality is now an operational governance infrastructure.[204] Algorithmic reason is now a tool of necropolitical character, a means by which society constructs enemies, sorts populations, and administers social death at scale.[205]

The constitutional stakes of this distinction are precise. The

---

the methodological questions raised by studying how algorithms govern conduct); *see also* Michael Livermore, *The Political Limits of Algorithmic Governance*, REGUL. REV. (Dec. 2025) (distinguishing "algocracy," in which algorithms support human democratic institutions, from "algoarchy," in which algorithms eliminate sites of resistance, and arguing that "liberal democracies operate on friction" such that frictionless algorithmic governance is structurally anti-democratic regardless of its political valence).

[203] Gauthier et al., *supra* note 188.

[204] *See* Catanzaro, *The Dead Law Theory*, *supra* note 30 (manuscript at 7) (arguing that computational interpretation produces the meaning it claims to recover, demonstrating that hyperreality operates as a structural condition of the interpretive act rather than as theoretical metaphor). The present analysis extends that argument from the epistemic domain to the material: where Dead Law Theory shows that simulated interpretation constructs meaning, the present analysis shows that algorithmic prediction constructs the social conditions it claims to describe. Both arguments rest on the same Baudrillardian premise; the operative domain differs.

[205] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 105 (identifying "algorithmic reason" as a rationality that "constructs enemies via statistics, modeling, and mathematics," treating algorithms as instruments deployed by living sovereign power); *see also* ACHILLE MBEMBE, BRUTALISM 178 (Steven Corcoran trans., 2024) ("[T]he world has, so to speak, become a curve, a circle, a diagram, an algorithm."). Both passages treat computational systems as extensions of identifiable sovereign will. The present analysis argues that the relationship inverts when the algorithm outlives its sovereign author: the instrument has become the operator. Independent scholarship is converging on the same theoretical move. *See* Alexa Hagerty, *Recursive Necropolitics: Historical Antecedents and Contemporary Practices of AI Afterlives*, 21 PROC. PARIS INST. FOR ADVANCED STUDY, 2024/4, art. no. 5 (2024) (coining the term "recursive necropolitics" to describe how power over death recursively manifests through AI systems across historical periods, identifying mechanisms by which algorithmic death technologies preserve and extend necropolitical power beyond the biological death of their authors).

necropolitical violates democratic legitimacy through force: a sovereign decides, now, who lives and who dies. Algorithmic necrocracy violates it through succession: the preferences of one generation, encoded before the next arrived, executing over conditions the next generation neither set nor consented to. The injury is not spectacular, it accumulates in the gap between the system's model weights and the citizen's changed circumstances. Every prior mechanism for posthumous control operated through juridical power that required ongoing human interpretation and remained subject to democratic revision.[206] Death remained the outer boundary: no mechanism existed to preserve and implement human agency independently of ongoing human judgment.[207] Algorithmic death-worlds break this pattern by combining two structures.

The first is persistence: automated cognition that extends intentionality beyond biological death, adapting continuously to new conditions. The second is reality-construction and meaning-making are found in the domains of stochastic epistemology, performative prediction, and enclosed digital regimes of truth. Together they operate beyond the temporal boundaries a democracy requires for legitimacy.[208] From this emerge "a different kind of human entangled with objects, technologies, and other living or animate things . . . constituted through and within digital technologies and new media forms. This is not at all the liberal individual who, not so long ago, we believed could be the subject of democracy."[209]

Algorithmic necrocracy emerges from the remains of our constitutional ordering: rule beyond death enabled at last by the encoded preferences of the dead, implemented through computational systems designed to persist beyond the

---

[206] *See supra* Part II.

[207] *See* Samaha, *supra* note 101, at 610–12; *see also* JED RUBENFELD, FREEDOM AND TIME: A THEORY OF CONSTITUTIONAL SELF-GOVERNMENT 4–8 (2001) (developing temporal theory of democratic self-government from Jefferson's usufruct principle).

[208] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 126–27 ("Once operational, the Necrocracy becomes self-referential, creating a feedback loop that gradually divorces decision-making from contemporary human input.").

[209] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11.

biological limitations of their creators.[210] Constitutionalism limits sovereign power exercised by living rulers through accountable institutions. Posthumous power exercised through autonomous computational architectures has no constitutional framework.[211] Current debates over responsible AI do not ask whose autonomy these systems are designed to outlast.[212]

---

[210] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 127 ("Through the mass collection of financial records, personal communications, biometric data, personal affiliations and relationships, the Necrocracy comes to control and influence the living in ways that were previously unimaginable."). *Compare* CEDRIC DURAND, TECHNOFEUDALISM: CRITIQUE OF THE DIGITAL ECONOMY (2022) (arguing digital platforms extract rent through platform dependency, displacing profit from productive investment), *with* YANIS VAROUFAKIS, TECHNOFEUDALISM: WHAT KILLED CAPITALISM (2023) (arguing "cloud capital" has converted competitive markets into feudal fiefdoms extracting tribute from users). Algorithmic necrocracy names a distinct dimension: not the economic relationship of rent extraction but the temporal and political relationship in which the encoded preferences of specific actors govern populations across time horizons that democratic processes cannot reach. A system may be simultaneously technofeudal and necrocratic; the concepts address different dimensions of the same infrastructure.

[211] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 107–12 ("What is this new condition? Hoping for a possible victory over the master is no longer appropriate. We no longer expect the master's death. We no longer believe he is mortal. As the master is no longer mortal, a sole illusion prevails over us, namely that we ourselves participate in the master. We are now living only a single desire, increasingly so on screens, from screens. The screen is the new scene. The screen does not only seek to abolish the distance between fiction and reality. It has become reality-generating. It forms part of the conditions of the century."); Avbelj, *supra* note 175, at 1083–84; *see also* Oren Perez & Nurit Wimer, *Algorithmic Constitutionalism*, 30 IND. J. GLOBAL LEGAL STUD. 81, 83–86 (2023) (proposing a layered code architecture in which a protected meta-level monitors and corrects the system's object level operations, subject to external deliberative correction, to constrain AI systems that ethical-engineering approaches do not).

[212] *See* Emma Ruttkamp-Bloem, *Intergenerational Justice as Driver for Responsible AI*, *in* ARTIFICIAL INTELLIGENCE RESEARCH 18, 18–19 (Anban Pillay, Edgar Jembere & Aurona J. Gerber eds., 2023); *see also* Victor Klockmann, Alicia von Schenk & Marie Claire Villeval, *Artificial Intelligence, Ethics, and Intergenerational Responsibility*, 203 J. ECON. BEHAV. & ORG. 284, 286–90 (2022) (finding experimentally that those training an algorithm that will make decisions affecting future generations behave more prosocially only when they themselves risk being harmed by

Nor do they resolve the problem.[213] Whether a living democracy can survive against the rule of the dead.[214]

IV. Sovereignty in the Singularity

Positive law provides scant relief. Disciplinary societies operate through confinement and normalization, in identifiable violations, enforceable norms, and bounded institutions where sanctions could land.[215] Control societies operate through continuous modulation, absent a confinement to challenge or a violated normative belief, optimization targets scale and shift before law can reproach them.[216]

---

the algorithm's later choices); Iason Gabriel, *Toward a Theory of Justice for Artificial Intelligence*, 151 DAEDALUS 218, 222–24 (2022) (arguing that because AI increasingly shapes society's basic structure, Rawlsian principles of distributive justice govern its design and deployment).

[213] *See* QUINN SLOBODIAN, CRACK-UP CAPITALISM: MARKET RADICALS AND THE DREAM OF A WORLD WITHOUT DEMOCRACY (2023) (tracing how radical market libertarians pursue "perforation" of the nation-state to create zones of exception without democratic oversight); *see also* Morgan Meaker, *Welcome to the Age of Technofeudalism*, WIRED (Apr. 9, 2024) (quoting Yanis Varoufakis); Christopher Collins, *Anti-Democratic 'Dark Enlightenment' Ideas Have Spread from Silicon Valley to Washington*, CASCADE INST. (May 20, 2025), https://cascadeinstitute.org/dark-enlightenment [https://perma.cc/5WEX-VMWT] (documenting the genealogy from Yarvin's and Land's accelerationist philosophy to current federal policy implementation and identifying the tech-sovereign network as a coherent anti-democratic intellectual formation).

[214] *See* McConnell, *supra* note 95, at 1128 ("To whatever extent our present-day decisions are shaped or constrained by the Constitution . . . we are governed by the dead hand of the past.").

[215] *See* Catanzaro, *Algorithmic Dead Hands*, *supra* note 21, at 126–27.

[216] *See* Gilles Deleuze, *Postscript on the Societies of Control*, 59 OCTOBER 3, 5–6 (1992) (arguing that control societies displace disciplinary societies through continuous modulation rather than bounded confinement: the factory gives way to the corporation, the school to perpetual training, and the prison to electronic monitoring; the subject is never finished, and the optimization target shifts before the law can reach it); *see also* PASQUALE, *supra* note 56, at 19 (describing how pervasive, largely invisible data collection feeds reputational scoring systems that continuously evaluate people who cannot see or context the criteria); Mireille Hildebrandt, *Algorithmic Regulation and the Rule of Law*, PHIL. TRANSACTIONS ROYAL SOC'Y A (2018) (distinguishing code-drive from data-drive regulation and proposing agnostic machine learning to bring data-drive regulation under

Computational systems process legal constraints as additional parameters rather than binding limitations, converting normative boundaries into variables within their optimization logic. Constraints no longer stop the system but rather subsume into their operational function.

Consider how the European Union's AI Act plays the dynamic out at scale.[217] Transparency requirements designed to constrain algorithmic decision-making became incorporated as compliance metrics, generating automated reports that satisfied the letter of oversight requirements while the systems of computational control continued to operate undisturbed.[218] Algorithmic auditing requirements followed along the same path: democratic accountability converted into a technical procedure the system satisfies through automated compliance reporting, leaving operational autonomy intact.[219] The law intended to reach the algorithm simply became another variable the algorithm was trained to optimize.[220]

A remedy cannot come from outside the computational domain, because the outside no longer exists. Constitutional firewalls establishing domains explicitly protected from algorithmic decision-making, interpretive sovereignty preserving human authority over the meaning of legal texts, and democratic interruption maintaining citizen capacity to halt algorithmic processes: each operates not by constraining algorithmic systems from without but by preserving within governance structures the spaces where human judgment retains final authority.[221] External regulation produces optimization targets, while internal regulation produces irreducible human prerogatives.

---

the rule of law by reintroducing adversarial contestation into a systems' computational architecture).

[217] *See What Is the EU AI Act?*, IBM, https://www.ibm.com/think/topics/eu-ai-act [https://perma.cc/9BEG-MWGS].

[218] *See* Algorithmic Accountability Act of 2023, S. 2892, 118th Cong. (2023).

[219] *Id.*

[220] *Id.*

[221] *See* BAUDRILLARD, SYMBOLIC EXCHANGE AND DEATH, *supra* note 1, at 80–81.

A. The Residual Commons

The institutions that have historically held against concentrated power share a common architecture: they disperse and decentralize authority, interrupt continuity, and preserve the conditions for genuine human judgment.[222] They constitute constitutional commons: domains where democratic deliberation operates independently of algorithmic mediation and remains accessible to citizen participation.[223] Systems of control generate their own resistance when they become sufficiently pervasive to threaten the lived experience of human agency. Three institutions have documented that resistance most precisely.

The Jury. The jury function must remain inexorable. No algorithm can be allowed to predict what a jury will decide. Consider how in *Bushell's Case*, a case where jurors were imprisoned without food or fire for refusing to convict William Penn held to their verdict for three days, establishing that jurors cannot be punished for what they decide.[224] In 1851, Daniel Webster personally directed the federal prosecution of the men who rescued Shadrach Minkins from custody under the Fugitive Slave Act, and Boston juries refused to convict a single one.[225] The structural features produce the resistance: dispersion across community rolls, one-time service that

---

[222] *See* Karen Yeung, *Algorithmic Regulation: A Critical Interrogation*, 12 REGUL. & GOVERNANCE 152, 158 (2018); *see also* Hannah Bloch-Wehba, *Algorithmic Governance from the Bottom Up,* 48 BYU L. REV. 69, 74 (2022) (contrasting dominant technocratic approaches to algorithmic accountability with a "democratic vision" under which "governance should proceed from the bottom up, rather than from the top down.").

[223] Council of Europe, *Recommendation CM/Rec(2020)1 on the Human Rights Impacts of Algorithmic Systems*; *see also* Bloch-Wehba, *supra* note 222, at 74 (observing that "[a]lgorithmic governance forges ahead without the consent of those whom it most profoundly affects," as firms and governments "set policy through design and procurement processes shielded from public input.").

[224] Bushell's Case (1670) 124 Eng. Rep. 1006 (C.P.); *see* THOMAS A. GREEN, VERDICT ACCORDING TO CONSCIENCE: PERSPECTIVES ON THE ENGLISH CRIMINAL TRIAL JURY, 1200–1800, at 200–64 (1985).

[225] *See* Gary Collison, *'This Flagitious Offense': Daniel Webster and the Shadrach Rescue Cases*, 1851-1852, 68 NEW ENG. Q. 609 (1995).

forecloses capture, and unanimity requirements that force genuine engagement with dissent. No single actor can profitably capture a jury, because each panel is assembled for one case and then dissolved. [226]

Akhil Reed Amar, writing in the *Yale Law Journal*, identified the jury as the paradigmatic image of the original Bill of Rights, appearing in three separate amendments, because the Framers understood it as a necessary check on government that salaried, appointed officials cannot provide.[227] The jury forces confrontation with the living because it is constituted from the living, deciding only once, and answerable to no one.[228]

Mathews v. Eldridge established that procedural adequacy depends on the nature of the interest at stake, calibrated across three factors: the private interest affected, the risk of erroneous deprivation, and the governmental interest in the existing procedure. What the Court did not confront in 1976 is a form of deprivation in which the decision-maker is structurally incapable of individualized explanation. Cigna's PxDx system fails the *Mathews* test not because it is fast but because its criteria are proprietary, its reasoning is unavailable, and no procedure exists through which a denied patient can contest the specific basis for her denial. The risk of erroneous deprivation cannot even be assessed, as there is no mechanism for identifying error, because the black-box system's criteria generating the decision cannot be examined by a neutral third party.

Certain interests are thus categorically incompatible with decision-making processes that eliminate individualized explanation. Healthcare coverage, criminal sentencing, and welfare eligibility are interests *Mathews* already recognizes as commanding heightened procedural protection. A decision-maker who cannot explain its reasoning cannot satisfy that protection regardless of its accuracy rate. The jury, the

---

[226] *See The Jury System*, U.S. CTS., https://www.uscourts.gov/services-forms/jury-service/about-jury-service [https://perma.cc/3PTB-2J9E].

[227] Akhil Reed Amar, *The Bill of Rights as a Constitution*, 100 YALE L.J. 1131, 1183 (1991).

[228] *See* AKHIL REED AMAR, THE BILL OF RIGHTS 81–98 (1998).

administrative hearing, and the judicial appeal all share one feature the algorithm lacks: a human who can be asked why. That feature is not procedural decoration but the constitutional minimum.[229]

Sunset Clauses. Where algorithmic systems operate through continuous processing and real-time optimization, the sunset clause cuts the wire. Section 215 of the USA PATRIOT Act was enacted subject to a sunset. When it lapsed on June 1, 2015, Congress restored it a day later only on condition that bulk collection end: the first time since 1978 that Congress restricted rather than expanded the government's surveillance authority.[230] Section 215 expired again in March 2020 and has not been reauthorized.[231] The 2001 Authorization for Use of Military Force was enacted without a sunset provision and has operated for a quarter century with no structural mechanism forcing democratic re-engagement. [232] Jefferson's usufruct

---

[229] Mathews v. Eldridge, 424 U.S. 319, 335 (1976) (establishing the three-factor balancing test for procedural due process adequacy); *see also* Binns, *supra* note 104, at 204 ("The demand for human involvement reflects the value placed on the social relationship of accountability."); State v. Loomis, 881 N.W.2d 749, 761 (Wis. 2016) (court deferred to proprietary algorithm while acknowledging defendant could not examine or challenge the system, the precise *Mathews* failure the constitutional argument addresses); *cf.* Goldberg v. Kelly, 397 U.S. 254, 268–69 (1970) (welfare termination requires pretermination hearing because the interest at stake cannot be adequately protected by post-deprivation review alone, the same logic bars automated denial of comparable interests).

[230] *See* USA PATRIOT Act of 2001, Pub. L. No. 107-56, §§ 215, 224, 115 Stat. 272, 287–88, 295; PATRIOT Sunsets Extension Act of 2011, Pub. L. No. 112-14, § 2, 125 Stat. 216, 216 (extending sunset to June 1, 2015); USA FREEDOM Act of 2015, Pub. L. No. 114-23, §§ 101–03, 705, 129 Stat. 268, 269–72, 300 (prohibiting bulk collection and extending the amended authority to December 15, 2019); Neema Singh Guliani, *What's Next for Surveillance Reform After the USA Freedom Act*, ACLU (June 3, 2015), https://www.aclu.org/news/national-security/whats-next-surveillance-reform-after-usa-freedom-act [https://perma.cc/XL2F-KYFA].

[231] *See* Further Continuing Appropriations Act, 2020, Pub. L. No. 116-69, § 1703, 133 Stat. 1134, 1143 (2019) (extending sunset to March 15, 2020); India McKinney, *Section 215 Expired: Year in Review 2020*, Elec. Frontier Found. (Dec. 29, 2020), https://www.eff.org/deeplinks/2020/12/section-215-expired-year-review-2020 [https://perma.cc/GT64-P39D].

[232] *See* Authorization for Use of Military Force, Pub. L. No. 107-40, 115 Stat.

principle has an institutional incarnation: the sunset clause is what a constitutional order looks like when it takes seriously the proposition that each generation must actively consent to what it inherits.[233]

The Framers made this explicit in Article I, Section 8, Clause 12, which bars any appropriation for the army from running longer than two years. The limit encodes a specific temporal theory of democratic legitimacy: no generation may bind the next on questions of force, and no Congress may fund a standing army beyond its own democratic mandate. The two-year rule was not peculiar specificity but constitutional architecture for exactly the problem algorithmic necrocracy revives.

A healthcare algorithm denying care to hundreds of thousands is not categorically different, as a constitutional matter, from a military force deployed against them. Both exercise sovereign-equivalent power over life, and both require ongoing democratic authorization. The Framers' response to standing armies was a hard temporal limit. The constitutional response to standing algorithms should follow the same logic: systems that exercise sustained authority over rights-bearing decisions require periodic reauthorization, with the burden shifting to proponents as temporal persistence increases. The courts should thus view these temporal limitations as implicit in the structure of the Constitution itself.[234]

---

224 (2001).

[233] *See* Jacob E. Gersen, *Temporary Legislation*, 74 U. CHI. L. REV. 247, 249–52 (2007); *see also* Benjamin Lauenroth, Note, *The Critical Nature of Sunset Provisions in National Security Legislation*, 113 GEO. L.J. 885, 890 (2025) (arguing that a sunset provision "exchanges a presumption of continuance for one of discountinuance," forcing Congress to revisit national security authorities rather than leaving them in force by default).

[234] U.S. CONST. art. I, § 8, cl. 12 ("To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years . . . ."); *see also* THE FEDERALIST NO. 26 (Alexander Hamilton) (explaining that the two-year limit reflects the constitutional principle that "the legislature of the United States will be obliged by this provision, once at least in every two years, to deliberate on the propriety of keeping a military force on foot"); Gersen, *supra* note 233, at 249–52 (analyzing sunset provisions as constitutional technology for preserving democratic revision authority over delegated power); Lauenroth, *supra* note 233, at 889

The Citizens' Assembly. Randomly selected citizens deliberating in structured conditions provide the closest thing to a controlled experiment the democratic record offers on whether genuine preference transformation survives algorithmic saturation. Fishkin's deliberative polling experiments documented the mechanism across decades of data: in-person deliberation produces systematic preference transformation that online engagement does not replicate, because when the body is present the costs of dismissal rise and the speaker must answer for her position in real time.[235] In a survey of the Irish Citizens' Assembly, ninety-nine randomly selected citizens, deliberating over eighteen months with expert testimony and structured facilitation, recommended amending the constitutional prohibition on abortion eighty-seven to thirteen; the national referendum passed at 66.4%, closely tracking the result.[236] Random selection breaks the correlation between algorithmic exposure and selection into governance roles: the deliberator, unlike the legislator, was not identified by an algorithm as persuadable. The Assembly produces outcomes no optimization algorithm could replicate, and their democratic legitimacy flows from that fact.

Adversarial legal proceedings likewise preserve interpretive plurality by requiring adjudication of competing frameworks that no algorithm can resolve: the Dutch court's

---

(demonstrating that mandatory sunset provisions consistently produce more deliberate reauthorization than open-ended delegations).

[235] *See* JAMES FISHKIN, DEMOCRACY WHEN THE PEOPLE ARE THINKING 33–47 (2018); *see also* Cynthia Farina et al., *Rulemaking in 140 Characters or Less*, 31 PACE L. REV. 382, 414–19 (2011) (concluding from an e-rulemaking experiment that habitual online engagement works against the informed, dialogic participation rulemaking requires) .

[236] *See* DAVID M. FARRELL & JANE SUITER, REIMAGINING DEMOCRACY: LESSONS IN DELIBERATIVE DEMOCRACY FROM THE IRISH FRONT LINE (2019) (documenting that the Irish Citizens' Assembly voted eighty-seven to thirteen to recommend amending the Eighth Amendment; the subsequent national referendum passed at sixty-six point four percent, closely mirroring the Assembly result); James S. Fishkin et al., *Is Deliberation an Antidote to Extreme Partisan Polarization?*, 115 AM. POL. SCI. REV. 1464, 1470 (2021) (participants arrived with algorithmically shaped media diets and produced significant depolarization on twenty of twenty-six polarized policy proposals).

holding in *Stichting Privacy First v. Netherlands* that SyRI violated the European Convention on Human Rights produced a determination of incompatibility the system's operators could not optimize around.[237] Physical spaces of democratic engagement enforce the same logic at smaller scale: deliberation that transforms preferences requires encounter with those who disagree, and the replacement of in-person hearing rights with digital portal requirements excludes the populations most harmed by algorithmic governance from the very processes designed to contest it.[238]

The Recursive Capture Problem. An objection of increasing empirical weight runs against each of these institutions: algorithmic systems reshape the preferences of the citizens and legislators on whom institutional remedies depend, operating beneath the threshold of any external constraint. Gauthier and colleagues, in a preregistered randomized experiment published in *Nature* in 2026, assigned nearly 5,000 active X users to either an algorithmic feed or a chronological feed over seven weeks. Exposure to the algorithmic feed shifted political attitudes 4.7 percentage points in a conservative direction, with asymmetric stickiness: switching back to chronological did not

---

[237] *See* Rechtbank Den Haag [District Court of The Hague], Feb. 5, 2020, C-09-550982-HA ZA 18–388, ECLI:NL:RBDHA:2020:1878 (holding that the System Risk Indication (*Systeem Risico Indicatie* or 'SyRI') algorithmic risk-scoring system violated Article 8 of the European Convention on Human Rights (ECHR); the court required that interference with rights be based in accessible, fore*see*able, and proportionate law that the subject can contest). This system, which linked personal data held across government agencies to generate risk reports flagging individuals for welfare, tax, and benefits fraud investigation, violated Article 8(2) of the European Convention on Human Rights. Although combating fraud was a legitimate aim, the court found that the statute failed to strike a fair balance with the right to private life because the State refused to disclose the risk model, its indicators, or the data used, leaving those affected unable to learn that they had been profiled or to contest the result. *See id.* ¶¶ 6.82–6.95. The court also noted the risk that a system deployed in designated "problem neighborhoods" would discriminate on the basis of socioeconomic or migrant status. *Id.* ¶¶ 6.91–6.93. The State did not appeal.

[238] *See* Jonah Gelbach & David Marcus, *Rethinking Judicial Review of High Volume Agency Adjudication*, 96 TEX. L. REV. 1097, 1125–29 (2018), https://texaslawreview.org/wp-content/uploads/2018/05/Gelbach.pdf [https://perma.cc/S8B4-ZLA2].

reverse the shift, because users had accumulated right-leaning follows during algorithmic exposure that persisted after the switch.[239] The divergent findings between the X study and the 2023 Meta experiments show that algorithmic effects are platform-contingent and historically variable, not deterministic.[240] The argument rests on irreducibility, not immunity from algorithmic saturation. Put differently, what cannot be optimized cannot be fully captured.

B. The Living Claim

The proposals that follow argue what the Constitution structurally implies, not what positive law can still deliver. The recursive pressure documented above may already have foreclosed them.

Generational Sovereignty Protections would constitutionalize Jefferson's principle that "the earth belongs in usufruct to the living" by requiring that algorithmic systems remain subject to periodic democratic reauthorization.[241] The Founders' constitutional design implicitly institutionalized that principle through elections, term limits, and an amendment process calibrated to human lifespans: mechanisms whose purpose was to ensure the preferences of the dead could not permanently bind the living.[242] These protections would mandate sunset provisions for algorithmic systems affecting

---

[239] *See* Gauthier et al., *supra* note 188.

[240] *Compare* Gauthier et al., *supra* note 188, *with* Andrew M. Guess et al., *How Do Social Media Feed Algorithms Affect Attitudes and Behavior in an Election Campaign?*, 381 SCIENCE 398 (2023); *see also* Tiziano Piccardi et al., *Reranking Partisan Animosity in Algorithmic Social Media Feeds Alters Affective Polarization*, 390 SCIENCE 903 (2025) (explaining how a new method to study feed algorithms independent of platform cooperation has since been developed).

[241] *See generally* Axel Gosseries, *Generational Sovereignty*, *in* INSTITUTIONS FOR FUTURE GENERATIONS 98 (Iñigo González-Ricoy & Axel Gosseries eds., 2016) (putting forth three models of ensuring generational sovereignty as aligned with Thomas Jefferson's view that generations should be independent to one another).

[242] *See supra* Section II.E (discussing Madison's, Hamilton's, and Jefferson's convergent argument that constitutional design institutionalizes mortality's disruptive function: elections, term limits, and the amendment process operate as legal translations of the one constraint no sovereign escapes).

democratic processes, requiring each generation to actively consent to what it inherits rather than receiving it as permanent structure.[243] Systems operating beyond specified temporal limits would face escalating requirements for democratic justification and citizen oversight through *algorithmic inheritance taxes* that impose increasing democratic burdens as systems persist across generational boundaries.[244]

Algorithmic Commons Provisions would establish constitutional protection for domains explicitly preserved for non-algorithmic democratic judgment. Parliament's Statute of Mortmain recognized the dead hand of ecclesiastical accumulation as a structural threat: certain domains could not be held in perpetuity by institutions that did not die.[245] Core governmental functions, including voting rights determinations, constitutional interpretation, criminal sentencing, and fundamental rights adjudication, require human decision-making immune from algorithmic optimization.[246] The commons is a zone of categorical human

---

[243] *See* U.S. CONST. art. I, § 8, cl. 12 ("To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years . . . .").

[244] *See generally* U.S. GOV'T ACCOUNTABILITY OFF., GAO-21-519SP, ARTIFICIAL INTELLIGENCE: AN ACCOUNTABILITY FRAMEWORK FOR FEDERAL AGENCIES AND OTHER ENTITIES (June 2021) (identifying key practices to ensure accountability and responsible AI use by federal agencies and others in the design, development, and continuous monitoring of AI systems).

[245] *See supra* Section II.C (discussing Parliament's Statute of Mortmain as the constitutional tradition's foundational response to the dead hand problem: ecclesiastical accumulation of property in perpetuity was recognized as a structural threat to democratic governance precisely because those institutions did not die, and legislative restraint was required to hold them accountable to the living); *see also* Ben Wagner, *Liable, But Not in Control? Ensuring Meaningful Human Agency in Automated Decision-Making Systems*, 11 POL'Y & INTERNET 104, 118 (2019) (warning against "quasi-automation," in which a nominal human in the loop lacks the time, information, or authority to alter an automated decision).

[246] Mekela Panditharatne, Lawrence Norden, Joanna Zdanys, Daniel I. Weiner & Yasmin Abusaif, *An Agenda to Strengthen U.S. Democracy in the Age of AI*, BRENNAN CTR. FOR JUST. (2025), https://www.brennancenter.org/media/13711/download/ai-and-democracy-agenda-report-jan-2025.pdf?inline=1 [https://perma.cc/BE6R-MEPJ]; John

authority.[247] Within it, citizens would hold enforceable rights to non-algorithmic decision-making, with standing to challenge algorithmic encroachment on those processes.[248] The burden of demonstrating compatibility with citizen understanding and democratic oversight falls on algorithmic systems, not on the citizens they govern. Technical complexity is used as a shield from oversight, and treating comprehensibility as a constitutional requirement removes it.[249]

C. The Last Interpreter

Enforcement cannot be delegated to the systems being enforced against. That constraint rules out the most technically sophisticated oversight mechanisms and demands institutional designs that deliberately sacrifice efficiency for independence.[250]

Citizen Oversight Tribunals would establish democratically selected bodies with authority to investigate and halt algorithmic systems that violate constitutional protections for democratic sovereignty. [251] The combination of citizen

---

Villasenor & Virginia Foggo, *Algorithms and Sentencing: What Does Due Process Require?*, BROOKINGS (Mar. 9, 2022).

[247] Regulation 2016/679 of Apr. 27, 2016, General Data Protection Regulation, 2016 O.J. (L 119) 1, art. 22(1); Gianclaudio Malgieri, *The Questionable Necessity of a New Human Right Against Being Subject to Automated Decision-Making*, 31 INT'L J.L. & INFO. TECH. 114, 123 (2023).

[248] European Data Protection Board, *Guidelines on Automated Individual Decision-Making and Profiling*, WP251rev.01, at 68 (2018); Cal. Consumer Privacy Act, CAL. CIV. CODE § 7221(b) (West 2022).

[249] *See supra* Section II.D (discussing Rousseau's argument that the general will exists only in the present tense and cannot be transmitted across generational lines: to bind the living to the preferences of the dead is not to extend legitimate authority but to end it); *see also* State v. Loomis, 881 N.W.2d 749, 761 (Wis. 2016) (upholding the use of COMPAS risk assessment at sentencing even though developer treated the tool as a trade secret and did not disclose "how the risk scores are determined or how the factors are weighed"); PASQUALE, *supra* note 56, at 8 (contending that transparency "is not just an end in itself, but an interim step on the road to intelligibility").

[250] Albert Meijer & Martijn Wessels, *Legitimacy of Algorithmic Decision-Making: Six Threats and the Need for a Calibrated Institutional Response*, 5 PERSPS. ON PUB. MGMT. & GOVERNANCE 232 (2022).

[251] Dirk J. Brand, *Algorithmic Decision-Making and the Law*, 10 J. E-

participation with technical competence through structured deliberation is what the argument requires: human judgment in direct confrontation with algorithmic complexity, not a tradeoff between democratic legitimacy and technical expertise.[252] Citizens would hold standing to petition for review of algorithmic systems affecting democratic processes.[253]

Constitutional Enforcement Through Algorithmic Resistance would establish legal protections for individuals and institutions that refuse to comply with algorithmic decisions affecting constitutional rights.[254] The right to demand a human decision-maker in core constitutional domains is the enforcement mechanism's foundation: not civil disobedience as a moral posture but a legally protected prerogative to require that governance remain accountable to a person who can be named, confronted, and held responsible.[255]

Each of these mechanisms is subject to the recursive absorption problem Section A diagnosed. The argument runs on irreducibility, not immunity. Some spaces of human judgment cannot be optimized away without destroying what they protect. Democratic governance requires those spaces even when it cannot guarantee them.

D. Form Without Force

DOGE demonstrates the paradox these frameworks cannot escape: algorithmic systems circumvent legal constraints through technical implementation that satisfies formal requirements while achieving substantively different

---

DEMOCRACY & OPEN GOV'T 146, 161 (2018).

[252] Bloch-Wehba, *supra* note 222, at 74; Yeung, *supra* note 222, at 158.

[253] *See* Rashid Mushkani, Hugo Berard, Allison Cohen & Shin Koseki, *Position: The Right to AI* (May 8, 2025), https://arxiv.org/abs/2501.17899v1 [https://perma.cc/TR4X-HMKR]; Committee on Political Affairs and Democracy, Council of Europe, Resolution on Democratic Governance of AI (2019).

[254] Jennifer Cobbe, *Algorithmic Censorship by Social Platforms: Power and Resistance*, 34 PHIL. & TECH. 739, 745–48 (2021).

[255] *See* Houda Elmimouni, Sarah Rüller, Konstantin Aal, Yarden Skop, Norah Abokhodair, Volker Wulf & Peter Tolmie, *Exploring Algorithmic Resistance: Responses to Social Media Censorship in Activism*, 9 PROCS. ACM HUM.-COMPUT. INTERACTION, May 2024.

outcomes.[256] Efficiency metrics and optimization algorithms claim compliance with constitutional requirements for democratic oversight while implementing the systematic elimination of democratic processes.[257] When congressional oversight committees attempt to review the decision-making, they encounter technical complexity that renders traditional constitutional mechanisms ineffective: formal compliance with separation of powers coexists with computational processes operating beyond meaningful legislative modification.[258]

Constitutional protections assume stable interpretive communities capable of shared understanding of foundational legal texts.[259] Algorithmic systems fragment those communities into atomized spheres governed by computational models rather than collective deliberation.[260] DOGE demonstrates the terminal form of this fragmentation: human oversight requirements implemented through algorithmic interfaces present predetermined options for democratic choice, the appearance of human agency within computationally determined parameters.[261]

Each of these proposals assumes a legal form still carries a substance, that institutions answer to something other than

---

[256] *See* Leah Litman, *How the Supreme Court Paved the Way for DOGE*, TIME (Feb. 28, 2025), https://time.com/7262781/supreme-court-doge-musk-trump/ [https://perma.cc/Z3DW-99DU].

[257] *See* Exec. Order No. 14,158, *90 Fed. Reg. 8441 (Ja*n. 29, 2025); *see also* Nai Lee Kalema, *What DOGE Could Mean for the Future of Democracy*, HARVARD KENNEDY SCH. CARR-RYAN CTR. FOR HUM. RTS. (Feb. 10, 2025).

[258] *See* Caitlin Babcock, *DOGE Administrator is Named – and It's Not Musk. How This 'Department' Works*, CHRISTIAN SCI. MONITOR (Feb. 26, 2025), https://www.csmonitor.com/USA/Politics/2025/0226/musk-gleason-doge-constitution [https://perma.cc/PR4G-FUEU].

[259] *See* Geoffrey R. Stone & William P. Marshall, *The Framers' Constitution*, DEMOCRACY J., Summer 2011; Gordon Gamm, *Interpreting the U.S. Constitution*, 45 FREE INQUIRY, Aug./Sept. 2025.

[260] PARISER, *supra* note 141; C. Thi Nguyen, *Echo Chambers and Epistemic Bubbles*, 17 EPISTEME (2020); David Hartmann, Sonja Mei Wang, Lena Pohlmann & Bettina Berendt, *A Systematic Review of Echo Chamber Research: Comparative Analysis of Conceptualizations, Operationalizations, and Varying Outcomes*, 8 J. COMPUTATIONAL SOC. SCI., Apr. 7, 2025.

[261] Exec. Order No. 14,158, *90 Fed. Reg. 8441 (Ja*n. 29, 2025).

performance, and that there is an author to hold to account. Giorgio Agamben describes a law that remains in force without significance: in the state of exception, the norm stays on the books while its application is suspended.[262] Algorithmic governance reaches that condition without any declaration of emergency. Notice is given and review is available, yet neither reaches the determination that matters. Jean-François Lyotard names the second condition performativity. A system legitimated by the ratio of its outputs to its inputs has no need to be true or just, and a reform that slows it registers as a cost to be reduced.[263] Finally, Jacques Derrida offers a third counter-argument; the specter is neither living nor dead, neither present nor absent, and the algorithm governs the same way: its commands arrive with no author who can be named, confronted, or replaced.[264] While a statutory sunset clause addresses a sovereign, these three conditions describe a power that has escaped sovereignty.

The jury, the sunset clause, and the citizens' assembly are not algorithmic solutions to an algorithmic problem but human spaces where the algorithm cannot mediate. Preserving those spaces is more important than perfecting any specific legal mechanism within them. The argument for algorithmic commons is not that law can reach these systems, but that law can preserve the territory where these systems have not yet arrived. In Agamben's state of exception[265] we find not the

---

[262] *See* Giorgio Agamben, *State of Exception* 1–3, 38–40 (Kevin Attell trans., Univ. of Chi. Press 2005) (2003) (describing the exception as a suspension of the norm that leaves the law formally in force, and arguing that it has become a normal paradigm of government); Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* 51 (Daniel Heller-Roazen trans., Stan. Univ. Press 1998) (1995) (law "in force without significance").

[263] *See* JEAN-FRANÇOIS LYOTARD, THE POSTMODERN CONDITION: A REPORT ON KNOWLEDGE 41–47 (Geoff Bennington & Brian Massumi trans., Univ. of Minn. Press 1984) (1979) (describing legitimation by performativity, in which a system justifies itself by optimizing the relation between its inputs and outputs).

[264] *See* Jacques Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning, and the New International* 10, 51 (Peggy Kamuf trans., Routledge 1994) (1993) (introducing "hauntology" and describing the specter as neither living nor dead, neither present nor absent).

[265] GIORGIO AGAMBEN, STATE OF EXCEPTION 2–3 (Kevin Attell trans.,

absence of law but its suspension from within: the legal order applies in the very act of its own withdrawal, and the subject remains bound by a framework whose protections no longer reach her. Algorithmic governance achieves this condition through technical means rather than emergency declaration. An algorithm does not suspend the Constitution; rather, it implements the Constitution's formal requirements in a register that makes their substance unreachable. Formal compliance and substantive inaccessibility coexist not despite the law but through it.

Lyotard named the epistemological form of this condition: the performativity criterion.[266] Knowledge is legitimated not by its truth but by its operational efficiency: not by what it means but by what it produces. Normative judgments become quantified expressions within computational models.[267] Legal frameworks that attempt to differentiate between algorithmic and non-algorithmic domains fail for the same reason: the boundary itself becomes algorithmically mediated.[268]

The governance that persists after democratic displacement is spectral: it exercises authority without a body, rules without

---

2005) (arguing that the state of exception is the dominant paradigm of government in contemporary politics: it is not the absence of law but law's application in the very act of its own suspension, such that the subject remains bound by a legal order whose protections have been withdrawn from her; algorithmic governance achieves the same condition through technical rather than emergency means, implementing formal constitutional compliance while rendering constitutional protections substantively unreachable); *see also* AGAMBEN, HOMO SACER, *supra* note 262, at 71 (explaining how the algorithmic subject who is scored, denied, and terminated by systems she cannot contest occupies the position of bare life: governed without being legally protected).

[266] LYOTARD, *supra* note 263, at 47 (framing it as the requirement to "[b]e operational [that is, commensurable] or disappear": knowledge and governance are legitimated not by truth but by operational efficiency, not by what they mean but by what they produce; democratic deliberation is displaced by the same logic that displaces every other form of knowledge that cannot be rendered measurable).

[267] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 109–10.

[268] Hildebrandt, *supra* note 216; *see also* Lepore, *Artificial State*, *supra* note *34* (describing a proposed "digital citizen's assembly" in which artificial intelligence recommends courses of action in place of human-run legislatures).

a ruler, governs without a present author. Democratic remedies designed for identifiable sovereign actors cannot reach a revenant. Political questions about governmental function, translated into technical optimization problems, become answers before deliberation can begin.[269] The result is epistemic displacement: democratic interpretation replaced by algorithmic determination, dressed in technical justification.[270]

V. Conclusion

Algorithmic systems achieve through technical means what prior governance could not achieve through political means. Sovereignty has always aspired to persistence beyond death. It has never succeeded. The divine right of kings expired with the king. Dynastic ownership and political power dissolved across generations. Algorithmic necrocracy is the first form of governance that makes the ongoing reaction against death structurally operational.

The frameworks proposed in Part IV do not resolve the challenge this poses. Their value lies in maintaining spaces of indeterminacy that computational logic cannot fully eliminate: preserving humanity's natality, the capacity to begin something genuinely new that interrupts automatic processes.[271] Humm argued that algorithmic governance displaces political authorship from collective judgment toward technical modulation, producing a "crisis of political natality", a condition in which the formal structures of democratic participation survive while the substantive capacity for

---

[269] Gil Duran, *'Reboot' Revealed: Elon Musk's CEO-Dictator Playbook*, NERD REICH (Feb. 5, 2025), https://www.thenerdreich.com/reboot-elon-musk-ceo-dictator-doge [https://perma.cc/J33M-Y2FD].

[270] *See* MBEMBE, NECROPOLITICS BOOK, *supra* note 11, at 182.

[271] HANNAH ARENDT, THE HUMAN CONDITION 247 (1958) ("The miracle that saves the world, the realm of human affairs, from its normal, 'natural' ruin is ultimately the fact of natality, in which the faculty of action is ontologically rooted."); *see generally* Mavis Louise Biss, *Arendt and the Theological Significance of Natality*, 7 PHIL. COMPASS 762 (2012) (examining whether Arendnt's account of natality as the root of political action should be read as purely secular philosophical).

unpredictable political beginning is extinguished.[272] The institutional remedies proposed here preserve what Humm shows is under attack. They do not merely regulate algorithmic systems from outside but maintain the structural conditions under which natality remains possible such as dispersion, rotation, presence, temporal discontinuity, and interpretive plurality.

The recursive capture objection establishes that algorithmic systems colonize the epistemic formation of the citizens on whom these remedies depend. Constitutional architecture converts resistance into enforceable constraint precisely because it does not depend on citizens arriving at deliberation with unmediated preferences. The jury deliberates among people who arrived with algorithmically shaped views and reaches verdicts those algorithms could not have predicted.[273] The sunset clause forces reauthorization among legislators whose beliefs have been shaped by two decades of computational media and produces, sometimes, the USA FREEDOM Act of 2015. The Irish Citizens' Assembly convened randomly selected citizens formed by forty years of Irish media and produced, by a margin of eighty-seven to

---

[272] Philipp Humm, *Predictive Modulation: The Algorithmic Authoritarianism Hypothesis and the Crisis of Political Natality*, PHILARCHIVE (Jan. 2025), https://philarchive.org/rec/HUMPMT [https://perma.cc/CN8D-97ER] (arguing that algorithmic governance produces a "crisis of political natality" by rendering social behavior predictable and anticipatable, displacing collective political judgment toward technical modulation and preserving electoral forms while extinguishing substantive democratic freedom).

[273] *See supra* Section II.E (discussing how the founders institutionalized mortality's disruptive function precisely because they understood that democratic deliberation does not require participants to arrive with unmediated preferences: it requires structural conditions that force genuine engagement: elections, term limits, and the amendment process as mechanisms calibrated to human lifespans that produce democratic outcomes regardless of what citizens carry into them); *see also supra* Section II.F (demonstrating that every prior mechanism for posthumous control preserved influence only through living interpreters, and that the interpreter's corruptibility was not a failure of the system but its democratic guarantee: the structural precondition that the jury, the sunset clause, and the citizens' assembly each institutionalize in their respective domains).

thirteen, a recommendation that contradicted the institutional position of the Catholic Church. The mechanism does not require pure citizens. It requires structured conditions.[274]

The singularity is the ultimate dead hand, human intention encoded in perpetuity, severed from the living context that gave it meaning. The consequential question is what happens to the governed. If the singularitarian vision is realized, the subject who lives under algorithmic governance becomes constituted by the dead hand of a prior sovereign. Her preferences, her information environment, and her political and social being are all presaged by systems she cannot meaningfully contest.[275] In the singularity, in our algorithmic death-world, persons are reduced to stochastic output masquerading as the self-governing liberal subject.

Constitutional democracy's essential insight, that legitimate authority derives from the ongoing consent of the living rather than the encoded preferences of the dead,[276] remains the most powerful challenge to Silicon Valley's vision of technological transcendence. Constitutional democracy cannot prevent or avoid the singularity should it come to be. The question is not whether democratic institutions can definitively prevent it, but whether they can preserve sufficient spaces of human agency to enable the kind of political renewal that transcends computational prediction. Without such spaces, we face not merely subjugation to techno-feudal aristocracy but the violent disruption that historically follows when governance becomes

---

[274] *See* FARRELL & SUITER, *supra* note 236 (documenting that the Irish Citizens' Assembly, convened from randomly selected citizens, voted 87–13 to recommend amending the 8th Amendment; the subsequent national referendum passed 66.4% in favor, closely mirroring the Assembly result); *see also* Fishkin et al., *supra* note 236, at 1470 (participants arrived with algorithmically shaped media diets and produced significant depolarization on twenty of twenty-six polarized policy proposals).

[275] *See* Piccardi et al., *supra* note 240, at 903.

[276] *See supra* Section II.E (developing the Founders' constitutional design as an institutionalization of Jefferson's 1789 usufruct principle: "the earth belongs in usufruct to the living," and elections, term limits, and the amendment process are mortality's legal translations, ensuring that no generation's preferences permanently bind those that follow without their ongoing consent).

completely detached from mechanisms of consent.

History teaches that overreaching systems of authority generate their own resistance when they threaten lived experience of human agency. Just as the Reformation emerged when ecclesiastical claims to spiritual authority became too extensive to sustain popular acceptance, algorithmic governance systems risk provoking backlash when their control mechanisms become sufficiently comprehensive to eliminate meaningful political choice and upend a social contract forged through centuries of reason and revolution. Yet within legal frameworks that maintain democratic possibilities within computational environments, the technological singularity's promise of digital immortality may confront its own fundamental contradiction: the impossibility of simulating genuine human freedom through systems designed to eliminate human unpredictability. In that confrontation between algorithmic control and democratic natality lies both the ultimate test of constitutional governance and its essential possibility for renewal beyond the algorithmic death-world.