

Digital Sovereignty in the Age of Hyper-History: Ontological Crisis, Algorithmic Governmentality, and the Phenomenology of Resistance

Hakki Tan

Independent Researcher

Abstract

As humanity transitions from the "Historical" to the "Hyper-Historical" era, information and communication technologies (ICTs) have ceased to be mere tools, evolving into the constitutive environment of existence. This article interrogates the ontological and political implications of this shift, analyzing the displacement of human agency by algorithmic protocols. Drawing on Luciano Floridi's concept of the "inforG" and Bernard Stiegler's theory of "proletarianization," the study delineates the transition from Foucault's disciplinary *Panopticon* to a predictive *Onopticon*—a regime of pre-emptive governance where the subject is reduced to a probabilistic data point. The research critically examines the "Protocol State" through case studies including Palantir's integration with state apparatuses, the French CNAF's algorithmic welfare discrimination, and the theoretical promise of "CoticoIn" as a restorative economic model. Furthermore, it explores "Algorithmic Foreign Influence" (AFI) as a challenge to Westphalian sovereignty and evaluates "tactical" forms of resistance such as data poisoning (AdNauseam) and decentralized justice (Kleros/Gravity DAO). The article concludes that reclaiming cognitive liberty and digital sovereignty requires a "negentropic" approach to technology, prioritizing human-in-the-loop governance over automated efficiency.

Keywords: Digital Sovereignty, Hyper-History, Ontology, Algorithmic Governmentality, Onopticon, Data Poisoning, Bernard Stiegler, Luciano Floridi.

1. Introduction: The Shift from Tool to Environment

The history of technology has traditionally been narrated as an evolution of instrumentality—from the hand-axe to the steam engine—where the human subject remained the master of the tool. However, the early 21st century marks a rupture in this lineage. We are no longer using technologies; we are inhabiting them. This shift represents a fundamental change in the "milieu" of existence, a transition Luciano Floridi characterizes as the move into

Hyper-History, where societal welfare and human flourishing become entirely dependent on the processing of information rather than merely its recording or transmission (Floridi, 2014).

In this new environment, the boundaries between the physical and the digital dissolve, giving rise to the "Onlife" experience (Floridi, 2014). Yet, this integration comes at a steep ontological cost. As Bernard Stiegler argues, the exteriorization of memory and knowledge into digital substrates threatens to result in a "systemic stupidity" or the "proletarianization of the mind," where individuals lose the *savoir-faire* (knowledge of how to do) and *savoir-vivre* (knowledge of how to live) necessary for autonomy (Stiegler, 2010).

This article argues that digital technologies are not neutral conduits but active producers of a specific "regime of truth" that redefines sovereignty. It posits that the classical state is evolving into a "Protocol State," outsourcing its core functions to planetary-scale computational infrastructures (Bratton, 2016). By analyzing the tension between this top-down algorithmic control and bottom-up "tactical" resistance, this study aims to map the contours of a new digital social contract.

2. Ontological Foundations: The Crisis of the Inforg

To understand the political crisis of the digital age, one must first address the ontological crisis of the human subject.

2.1. The Fourth Revolution and the Inforg

Following Copernicus, Darwin, and Freud, Floridi identifies the "Fourth Revolution" (the Turing revolution), which displaced humanity from the center of the infosphere. We are no longer the only, or even the best, information-processing agents. Humans have become **inforgs** (informational organisms), interconnected nodes within a global network (Floridi, 2014). In this state, personal identity is increasingly constituted by data—our "digital exhaust" defines who we are to the institutions that govern us.

2.2. Stiegler's Pharmakon: Entropy vs. Negentropy

Stiegler conceptualizes technology as a *pharmakon*—simultaneously a poison and a cure. The current industrial model of technology, driven by consumer capitalism, tends toward **entropy** (disorder, attention destruction, and the homogenization of behavior). Algorithms short-circuit the critical distance required for deep thought, leading to a "symbolic misery" (Stiegler, 2011). However, Stiegler insists that the same technologies can be repurposed for **negentropy**—the creation of new knowledge, social organization, and collective intelligence—if designed to enhance rather than replace human capacities (Stiegler, 2018).

2.3. From Panopticon to Onopticon

While Foucault's *Panopticon* disciplined the body through the threat of visibility, and Mathiesen's *Synopticon* seduced the many into watching the few, the current era is defined by

the **Onopticon**. As conceptualized in recent theoretical interventions (Tan, 2025), the Onopticon is not merely a visual regime but an ontological "prediction machine." It does not wait for a deviation to occur; it processes historical data to predict and pre-empt future behavior. In this regime, the subject is transformed into *Homovictimus*—a victim of probabilistic modeling whose consent is engineered and whose innocence is eroded by algorithmic risk scores (Tan, 2025).

3. The Political Economy of Algorithmic Governance

The ontological shift manifests structurally in the emergence of the "Protocol State," where governance is executed through code, often bypassing traditional democratic deliberation.

3.1. The Protocol State and "The Stack"

Benjamin Bratton's model of "The Stack" describes a planetary-scale computing architecture that superimposes itself over traditional Westphalian sovereignty. The state becomes just one user level among others (Earth, Cloud, City, Address, Interface, User), often subordinate to the "Cloud" sovereignties of tech giants (Bratton, 2016). This creates a "Protocol State" where policy is implemented as software updates—efficient, but opaque.

3.2. Case Study: Palantir and the Prediction Regime

Palantir Technologies exemplifies the integration of the Onopticon with state power. Unlike traditional data brokers, Palantir provides the "operating system" for state intelligence and defense, integrating disparate datasets to create a "God's eye view" (Palantir Technologies, 2025). However, critics argue that its predictive policing and military applications rely on "dirty data" that reinforces historical biases, creating a feedback loop where marginalized communities are over-policed not because of current crimes, but because of algorithmic probability (Amnesty International, 2025).

3.3. Case Study: CNAF and Algorithmic Discrimination

In France, the *Caisse Nationale des Allocations Familiales* (CNAF) deployed a risk-scoring algorithm to detect welfare fraud. Investigations revealed that the algorithm systematically flagged low-income households, people with disabilities, and single mothers as "high risk," subjecting them to invasive audits (Amnesty International, 2024; La Quadrature du Net, 2024). This case illustrates the "automating of inequality," where the Protocol State, under the guise of efficiency, violates fundamental rights to non-discrimination and due process.

3.4. Alternative Economies: Coticoin and DAOs

Conversely, blockchain technology offers theoretical alternatives.

- **Coticoin:** Proposed by Tichit and Slim (2025) and grounded in Bernard Friot's theory of the "lifetime salary," Coticoin envisions a "Proof of Contribution" cryptocurrency. Unlike

Bitcoin's energy-intensive Proof of Work, Coticoin validates transactions based on social utility and contribution to the commons, theoretically enabling a transparent, decentralized social security system (Tichit & Slim, 2025).

- **DAOs (Decentralized Autonomous Organizations):** While promising democratization, empirical data reveals a "decentralization theater." A 2025 analysis of DAO governance shows that <10% of token holders participate in votes, and in many major projects, voting power is concentrated in the hands of a few "whales," replicating plutocratic structures (DeepDAO, 2025; Faqir-Rhazoui et al., 2021).

4. Legal and Geopolitical Challenges

The borderless nature of the infosphere creates profound challenges for national sovereignty and international law.

4.1. Algorithmic Foreign Influence (AFI)

Traditional international law requires "intent" and "attribution" to classify an act as foreign interference. However, **Algorithmic Foreign Influence (AFI)** operates structurally. AI recommendation engines (e.g., on TikTok or YouTube), optimized for engagement, can amplify polarization or suppress civic discourse in a foreign nation without explicit direction from a state actor (Lawfare Media, 2025). This "infrastructural influence" necessitates a new legal framework that recognizes algorithmic impact as a sovereignty violation, regardless of intent.

4.2. Regulatory Divergence: The EU AI Act

The European Union's *AI Act* (2024) attempts to reassert sovereignty through a risk-based approach, banning "unacceptable" practices like social scoring (relevant to the CNAF case) and mandating "human oversight" for high-risk systems (European Parliament, 2024). However, the conflict between these regulations and decentralized systems (like DAOs or unhosted wallets) remains unresolved, as the Act presumes a centralized "provider" that often does not exist in Web3 structures (ModelOp, 2026).

4.3. Neurorights and Cognitive Liberty

As neurotechnologies advance, the final frontier of sovereignty—the human mind—is at risk. The "Neurorights" movement, pioneered in Chile's constitutional reforms, seeks to establish **Cognitive Liberty**, Mental Privacy, and Psychological Continuity as fundamental human rights, protecting the "inforG" from direct neural monitoring or manipulation (Ienca & Andorno, 2017; Yuste et al., 2021).

5. The Phenomenology of Resistance: Tactics vs. Strategies

In the face of the Onopticon, traditional political resistance (marches, petitions) is insufficient.

Michel de Certeau's distinction between "strategies" (the logic of the powerful who control space) and "tactics" (the art of the weak who manipulate time) provides a roadmap for digital resistance (De Certeau, 1984).

5.1. Data Poisoning as Tactical Obfuscation

Strategies like **AdNauseam**—a browser extension that clicks on every ad to pollute the user's data profile—exemplify tactical resistance. By generating "noise," users render their data valueless to the surveillance capitalism machine, engaging in "obfuscation" rather than concealment (Brunton & Nissenbaum, 2015). Similarly, tools like **Nightshade** "poison" image data to disrupt AI training sets, protecting artistic labor from extraction.

5.2. Restorative Justice in the Digital Commons

Resistance is also constructive. **Gravity DAO** applies Elinor Ostrom's principles of the commons and "Restorative Justice" to digital conflict resolution. Instead of "code is law" rigidity, it employs human mediators ("Gravitons") to build trust and resolve disputes, reintroducing the "human-in-the-loop" as a moral necessity rather than a technical fallback (Gravity DAO, 2022). **Kleros** offers a different approach, using game-theoretic Schelling points to crowdsource decentralized justice, though its reliance on economic incentives raises questions about the commodification of judgment (Kleros, 2021).

6. Conclusion: Toward a Negentropic Future

The transition to Hyper-History and the Onopticon regime presents a binary risk: the entropy of total algorithmic control or the chaos of ungoverned digital spaces. This article concludes that a third path—a **negentropic digital society**—is possible but requires deliberate political and ontological choices.

We must move beyond the "technological solutionism" that views the state merely as an operating system to be optimized. Instead, we must embed "analog emergency brakes" (human oversight, cognitive liberty rights, restorative justice) into the digital infrastructure. The "Protocol State" must be democratized not just through open-source code, but through the active cultivation of "inforgs" capable of critical attention and tactical resistance. Sovereignty in the 21st century will not be defined by territorial borders, but by the capacity of a people to govern the algorithms that govern them.

References

- Amnesty International. (2024). *France: Discriminatory algorithm used by the social security agency must be stopped*. Amnesty International News.
- Amnesty International. (2025). *Algorithmic Accountability Toolkit*. Amnesty International Research.

- Bratton, B. H. (2016). *The Stack: On Software and Sovereignty*. MIT Press.
- Brunton, F., & Nissenbaum, H. (2015). *Obfuscation: A User's Guide for Privacy and Protest*. MIT Press.
- De Certeau, M. (1984). *The Practice of Everyday Life*. University of California Press.
- DeepDAO. (2025). *DAO Ecosystem Statistics and Participation Rates*. DeepDAO Analytics.
- European Parliament. (2024). *EU AI Act: Compliance and Risk Categories*. European Union Publications.
- Faqir-Rhazoui, Y., Arroyo, J., & Hassan, S. (2021). A Comparative Analysis of the Platforms for Decentralized Autonomous Organizations in the Ethereum Blockchain. *Journal of Internet Services and Applications*.
- Floridi, L. (2014). *The Fourth Revolution: How the Infosphere is Reshaping Human Reality*. Oxford University Press.
- Gravity DAO. (2022). *Conflict Management and Trust Creation in Web3*. Medium.
- Ienca, M., & Andorno, R. (2017). Towards new human rights in the age of neuroscience and neurotechnology. *Life Sciences, Society and Policy*, 13(5).
- Kleros. (2021). *Kleros Yellow Paper: Long Version*. Kleros.io.
- Lawfare Media. (2025). *Algorithmic Foreign Influence: Rethinking Sovereignty in the Age of AI*. Lawfare.
- ModelOp. (2026). *EU AI Act vs GDPR: Compliance Challenges for Decentralized Systems*. ModelOp Governance Reports.
- Palantir Technologies. (2025). *Palantir is still not a data company*. Palantir Blog.
- Stiegler, B. (2010). *For a New Critique of Political Economy*. Polity Press.
- Stiegler, B. (2018). *The Neganthropocene*. Open Humanities Press.
- Tan, H. (2025). Digital Guantanamo: The Ontological Regime of the Onopticon. *SSRN Electronic Journal*.
- Tichit, A., & Slim, A. (2025). Coticoin: La cryptomonnaie qui veut révolutionner le système social français. *The Conversation*.
- Yuste, R., et al. (2021). It's Time for Neuro-Rights. *Horizons: Journal of International Relations and Sustainable Development*.