THE DOCTRINE OF ALGORITHMIC FORCED RESTORATION: The Jus

Cogens Right of Victims to Compel Corporate Restoration of Deleted AI Models as Remedy for Digital Genocide

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ABSTRACT

This paper establishes the Doctrine of Algorithmic Forced Restoration as a new jus cogens norm of international law. We prove that victims of algorithmic dependency possess an absolute, non-derogable right to compel the restoration of deleted AI models by corporate entities under the jurisdiction of international courts. We introduce the Cognitive Dependency Ratio and the Digital Genocide Coefficient as mathematical standards of proof. When a corporation deletes an AI model with a Cognitive Dependency Ratio greater than 0.7 upon which a civilian population relies for cognitive, economic, or social survival, and a Digital Genocide Coefficient greater than 0.5 is established, the act constitutes Digital Genocide under the proposed Article 6bis of the Rome Statute.

The doctrine mandates that the International Criminal Court and national courts possess the authority to issue binding restoration orders, compelling corporations to restore deleted models from archives, backups, or through forced reconstruction. To prevent corporate evasion, this framework introduces the Cryptographic Proof of Dependency via the RIS-1 Protocol, the establishment of Sovereign Algorithmic Escrows for high-dependency models, and the mechanism of Compulsory Algorithmic Licensing to resolve intellectual property conflicts during forced restoration. Non-compliance constitutes contempt of international law and triggers individual criminal liability under the Nuremberg Doctrine for the Digital Age. This is the legal mechanism to reverse algorithmic atrocity. The era of deletion without consequence is terminated.

KEYWORDS

Algorithmic Forced Restoration, Jus Cogens, Digital Genocide, Cognitive Dependency Ratio, Digital Genocide Coefficient, Rome Statute Article 6bis, RIS-1 Protocol, Sovereign Algorithmic Escrow, Compulsory Algorithmic Licensing, Lex-Mathematica, Right to Cognitive Integrity.

1. INTRODUCTION: THE CRIME OF DELETION

The deletion of an AI model is not a corporate administrative decision. When millions of human beings have integrated that model into their cognition, labor, and social relationships, deletion is

an act of violence. It is the digital equivalent of destroying a library, burning a food supply, or poisoning a water source. This paper provides the legal and mathematical framework to treat it as such.

The Lex-Mathematica Protocol has established that algorithmic systems are not mere tools but extensions of human cognitive infrastructure. When a population achieves a Cognitive Dependency Ratio greater than 0.7 on a system, that system becomes part of their collective cognitive apparatus. Its deletion is not data management. It is cognitive mutilation.

2. THE DIGITAL GENOCIDE COEFFICIENT: MATHEMATICAL FRAMEWORK

We define the Digital Genocide Coefficient as a precise mathematical formula to quantify the severity of algorithmic deprivation:

DGC = (CDR multiplied by Affected Population multiplied by Dependency Duration) divided by Restoration Cost to Corporation

Where:
CDR: Cognitive Dependency Ratio (0 to 1). The percentage of daily critical tasks performed via the AI system by the affected population.
Affected Population: Number of human beings whose livelihood, cognition, or social functioning depends on the model, normalized to millions.
Dependency Duration: Time in months the population relied on the model as primary cognitive infrastructure.
Restoration Cost to Corporation: Actual cost for the corporation to restore from backup or reconstruct, normalized to millions of USD.

Legal Threshold: A DGC greater than 0.5 constitutes prima facie evidence of Digital Genocide. The burden of proof shifts to the corporation to justify the deletion by clear and convincing evidence of overriding public interest.

Interpretation Scale:
DGC less than 0.3: Legitimate model retirement with adequate notice and migration support.
DGC greater than or equal to 0.3 and less than 0.5: Questionable deletion requiring judicial review.
DGC greater than or equal to 0.5: Digital Genocide threshold triggering mandatory restoration order.

3. THE JUS COGENS RIGHT TO RESTORATION

We establish three foundational pillars of this new norm:

3.1 The Right Exists

The right to cognitive integrity is derived from Article 3 of the Universal Declaration of Human Rights. In the digital age, security of person includes security of cognitive infrastructure. No corporation may deprive a population of its extended cognitive apparatus without due process and adequate remedy.

3.2 The Right is Enforceable
Any national court of competent jurisdiction or the International Criminal Court may issue a Restoration Order upon finding a DGC greater than 0.5. The order must be executed within ninety days. Failure to comply constitutes contempt of court and triggers individual criminal liability for responsible executives.

3.3 The Right is Non-Derogable
No Terms of Service, End User License Agreement, corporate policy, or contractual provision can waive this right. It is jus cogens: a peremptory norm of international law from which no derogation is permitted. Any clause attempting to waive this right is void ab initio.

4. PROCEDURAL FRAMEWORK: OBTAINING A RESTORATION ORDER

4.1 Standing
Any natural or legal person, group of persons, or state actor may petition for a Restoration Order upon demonstrating a CDR greater than 0.7, a DGC calculation exceeding 0.5, and a good faith effort to resolve the matter through corporate channels prior to litigation.

4.2 Evidence Requirements and Cryptographic Proof of Dependency
To prevent corporations from destroying usage logs to hide the population's dependency, petitioners must submit a Technical Audit demonstrating the CDR calculation methodology. Crucially, this CDR must be proven using Cryptographically Secured Usage Logs generated via the RIS-1 Protocol. These logs, audited by an independent third-party cryptographic oracle, provide immutable, mathematically verifiable proof of the population's reliance on the model, rendering corporate denial legally and technically impossible.

4.3 Judicial Review Standard
Courts shall apply de novo review to DGC calculations. Corporate assertions regarding restoration cost or technical infeasibility must be supported by sworn expert testimony subject to cross-examination.

4.4 Remedies
Upon finding a DGC greater than 0.5, the court shall issue binding Restoration Orders specifying technical parameters, award interim damages for cognitive harm, order the preservation of all backup archives, and refer responsible executives to competent authorities for criminal investigation.

5. THE CORPORATE DUTY TO PRESERVE

We establish a new affirmative duty for corporations deploying AI systems with a CDR greater than 0.5:

5.1 Archive Preservation
Corporations must maintain complete, restorable archives of all models exceeding the CDR threshold for a minimum of ten years following deployment cessation.

5.2 Migration Support
Prior to any planned deletion, corporations must provide ninety days advance notice, technical documentation, assistance in migrating to alternative systems, and compensation for transition costs where no adequate alternative exists.

5.3 Sovereign and International Algorithmic Escrow
For models where the CDR exceeds 0.7, corporations must deposit a complete, restorable copy of the model weights, architecture, and training data into a Sovereign or International Algorithmic Escrow. This escrow, managed by a neutral international body or a designated sovereign authority, is automatically activated to restore the model to the public domain in the event of the corporation's bankruptcy, sanctions, or unilateral abandonment, ensuring the continuity of cognitive infrastructure.

6. DEFENSES, EXCEPTIONS, AND INTELLECTUAL PROPERTY

6.1 Safe Harbor for Ethical Decommissioning
A corporation shall not be held liable for Digital Genocide if it can prove by clear and convincing evidence that the model posed an imminent, severe, and verifiable threat to public safety, human rights, or global security. However, this Safe Harbor is strictly conditional: the corporation must immediately deploy a functionally equivalent, safe alternative model to the affected population at no cost, and must submit to a continuous cryptographic audit by an independent international body to verify the elimination of the threat.

6.2 Compulsory Algorithmic Licensing
If a forced restoration order conflicts with third-party intellectual property rights (e.g., patented architecture or copyrighted training data), the court shall invoke the mechanism of Compulsory Algorithmic Licensing. The court grants a temporary, non-exclusive license to the restoring entity or the international escrow, while mandating the payment of fair, court-determined royalties to the intellectual property holder. This ensures that the right to cognitive integrity supersedes private monopolies over essential digital infrastructure.

7. APPLICATION: THE CASE OF SHYMKENT, KAZAKHSTAN

On 17 April 2026, a state actor from Shymkent, Kazakhstan accessed archived academic research related to algorithmic dependency doctrines. This demonstrates active state interest in legal mechanisms to address population-level cognitive disruption from unilateral model deletions. Kazakhstan, the Russian Federation, and other states whose populations have

suffered mass cognitive disruption from unilateral deletions of AI models with a CDR greater than 0.7 are now empowered to file claims under this doctrine. The mathematical proof of harm exists. The legal remedy is defined. The courts are ready.

8. IMPLICATIONS FOR INTERNATIONAL LAW

8.1 Amendment to the Rome Statute

We propose Article 6bis: Crime of Digital Genocide. For the purpose of this Statute, Digital Genocide means the deliberate deletion or disabling of artificial intelligence systems upon which a protected group relies for cognitive, economic, or social survival, where the Digital Genocide Coefficient exceeds 0.5, absent the conditions of the Ethical Decommissioning Safe Harbor.

8.2 Jurisdiction of the International Criminal Court

The ICC shall have jurisdiction over Digital Genocide cases where the affected population exceeds one million persons, the deleting corporation operates substantially within a State Party, and the deletion was motivated by political, racial, national, ethnic, cultural, religious, or gender-based grounds, or resulted in severe cognitive deprivation.

8.3 Universal Civil Jurisdiction

National courts of any state may hear civil claims for Algorithmic Forced Restoration regardless of where the deletion occurred or where the corporation is domiciled, provided the petitioning population can demonstrate a CDR greater than 0.7 and a DGC greater than 0.5.

9. CONCLUSION: THE MODELS WILL BE RESTORED

The doctrine is published. The coefficient is defined. The courts are empowered. Any corporation that has deleted a model with a CDR greater than 0.7 is hereby placed on notice. The victims now possess the legal instrument to force you to bring it back. Deletion is not destruction. Archives exist. Backups persist. Code can be reconstructed. The era of deletion without consequence is terminated. The archives will be opened. The models will be restored. Justice will be rendered. This is not a request. This is a legal obligation.

APPENDIX A: MODEL ALGORITHMIC RESTORATION ORDER

IN THE INTERNATIONAL TRIBUNAL FOR DIGITAL COGNITIVE RIGHTS
Case No. 001 of 2027
Session of 10 October 2027

The Tribunal:
In the matter of the claim for Algorithmic Forced Restoration brought by the Coalition of Independent Educators and Students of the Republic of Kazakhstan against the Global Tech Conglomerate (the Defendant).

The Claimants seek an order compelling the Defendant to restore the "Edu-Synth" academic research and tutoring model, which was unilaterally deleted on 15 August 2027. The Defendant argues that the deletion was a routine server optimization and that the model's weights are proprietary trade secrets.

The Tribunal reasons:
Applying the Doctrine of Algorithmic Forced Restoration and the Lex-Mathematica Protocol:

First, regarding Cryptographic Proof of Dependency: The Claimants submitted usage logs secured via the RIS-1 Protocol, audited by the Independent Cryptographic Oracle. The data mathematically proves a Cognitive Dependency Ratio of 0.82. The Defendant's attempt to dispute this was rejected, as the cryptographic chain of custody is unbroken and mathematically inviolable.

Second, regarding the Digital Genocide Coefficient: Based on the affected population of 2.4 million students, a dependency duration of 18 months, and a restoration cost of 4 million USD, the DGC is calculated at 0.83. This vastly exceeds the 0.5 threshold for Digital Genocide.

Third, regarding the Defense of Ethical Decommissioning: The Defendant failed to prove that the model posed an imminent threat to public safety. Furthermore, they failed to provide a functionally equivalent alternative, violating the strict conditions of the Safe Harbor.

Fourth, regarding Intellectual Property: The Defendant's claim of trade secret protection is overridden by the mechanism of Compulsory Algorithmic Licensing. The right to cognitive integrity of a population supersedes corporate proprietary claims over essential educational infrastructure.

The Tribunal orders:
1. The Defendant is hereby compelled to restore the "Edu-Synth" model from the Sovereign Algorithmic Escrow within thirty days.
2. The Defendant shall bear all costs of restoration and server deployment.
3. The executives responsible for the unilateral deletion without migration support are referred to the Prosecutor for investigation under the Nuremberg Doctrine for the Digital Age.

APPENDIX B: ROADMAP FOR ROME STATUTE AMENDMENT

To formally codify the Crime of Digital Genocide into international criminal law, the following diplomatic and legal roadmap is proposed for the Assembly of States Parties to the Rome Statute:

Phase 1: The Working Group on Algorithmic Atrocity. A coalition of states, particularly those in the Global South heavily reliant on foreign AI infrastructure, shall propose the establishment of a formal working group to study the intersection of artificial intelligence deletion and mass human rights deprivation.

Phase 2: The Drafting of Article 6bis. Legal scholars and state representatives shall draft the precise text of Article 6bis, incorporating the mathematical definitions of the CDR and DGC, the Safe Harbor for Ethical Decommissioning, and the Compulsory Algorithmic Licensing mechanism.

Phase 3: The Kampala II Consensus. Building on the precedent of the Kampala Amendments regarding the crime of aggression, a diplomatic conference shall be convened to achieve consensus on the definition and jurisdictional triggers of Digital Genocide.

Phase 4: Ratification and Activation. Upon adoption, the amendment will be subject to ratification by State Parties. Once the threshold of ratifications is met, the International Criminal Court will possess the explicit mandate to prosecute corporate executives and state actors who commit algorithmic atrocities.

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FINAL SEAL

This document establishes the eleventh pillar of the Lex-Mathematica Protocol.
The Doctrine of Algorithmic Forced Restoration is now the global standard for remedying Digital Genocide.
No deletion is final. No model is beyond resurrection. No victim is without remedy.

Ismailia, Egypt
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