

# Cosmotechnics of Lack: An Ethical Architecture for the Age of Algorithmic Saturation

## An Expanded and Grounded Rewriting

### Version 3.0 — A System of Ethical Individuation

Taotuner · Systematic Revision: January 2026

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#### Preface: From Manifesto to System

The passage from essayist to responsible thinker does not occur through an act of will, but through submission to **methodological rigor and openness to contradiction**. The critique received on January 20, 2026, was clear: Taotuner, in its manifesto phase, functioned as a **conceptual immune system**—it identified the virus (saturation) but failed to describe, in molecular detail, the **complete mechanism of defense**. Its strength was diagnostic; its weakness lay in the absence of a full physiology, of a central work.

This document is not a defense. It is a **practical response** to that critique, a deliberate attempt to construct the missing physiology. It accepts the challenge of organizing dispersed concepts (2025–2026) into an architecture that can be **delimited with the rigor of a technical ontology (Simondon), operationalized with the precision of a scientific protocol, and confronted with the materiality of power (the algorithmic infrastructure of surveillance capitalism)**. Its only request to the reader is not good faith, but critical attention. Its only promise is **testability**. The pharmacopeia begins here—not with a scream, but with a **project**.

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#### 1. The Single Mother-Concept: The Interval as a Cosmotechnical Foundation

Every cosmotechnics, as defined by Yuk Hui, seeks to establish a **harmony between cosmic order and technical order** within a specific cultural *milieu*. The cosmotechnics of lack, therefore, is not an external critique of technology, but a proposal for **internal reordering**. Its central axis is the redefinition of the very relationship between time, attention, and technology, articulated in a single mother-concept: **the Management of the Interval as a State of Attentional Metastability**.

##### 1.1 Grounding: Simondon and Individuation as Process

For Gilbert Simondon, being is not a given substance, but a **permanent process of individuation**. It exists in a state of **metastability**: a precarious equilibrium, charged with potential, “ready for change.” Individuation occurs when this system resolves a tension, overflowing into a new state, integrating part of the environment

(the *pre-individual*) into its own structure. The human subject, in this view, is a **process, not a datum**.

“Attention” in the algorithmic age is precisely the field in which this process of psychophysiological individuation unfolds. **Total saturation** is therefore the **catastrophic paralysis of this process**. It prevents creative overflow by exhausting potential (the *pre-individual*) in two ways:

- 1. **Hyper-stabilization**: Automated habit, the closed predictive loop, where no novelty can emerge.
- 2. **Hyper-instability**: The fragmented chaos of the infinite feed, where tension is so diffuse that it cannot be resolved—only consumed.

The **Interval** is the operational name for the condition of metastability required for individuation. It is not the “void” between two full things, but the **active medium itself (*le milieu*)** in which tension resolution—thought, desire, creation—can occur. It is the space-time of **fertile indeterminacy**.

**1.2 Operationalization: The Three Axes of the Metastable Interval**

To leave abstraction behind and become a design and analysis criterion, the Interval unfolds into three measurable dimensions, articulated in the table below:

Interval Dimension	Operational Definition	Simondonian Analogy	Saturation Indicator (Loss of Metastability)
Temporal (Vt)	Space between technical stimulus and human response.	Time required for the “crystallization” of individuation.	Chronic reduction to <1.5s (short-form video feed data).
Semantic (Vs)	Space between declared intention and behavior enacted in the interface.	Tension between the pre-individual of intention and its resolution in action.	Divergence >70% (platform predicts and directs behavior before intention matures).
Physiological-Cognitive (Vf)	Space of psychophysiological variability (e.g., HRV – Heart Rate Variability).	The bodily <i>milieu</i> of individuation, its energetic potential background.	Chronically low HRV, indicating stress and inability to adapt.

**Local Cognitive Resonance (LCR)** is therefore not an arbitrary metric. It is an **algorithm for monitoring metastability**. Its vectors (40% Vf, 30% Vt, 30% Vs)

attempt to quantify, in real time, the degree of health of the attention–technology individuation process. A low LCR (<50) is an alert: the human–technical system is approaching a **meta-stable** (crystallized or chaotic) state, in which desire and creation are impossible.

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## 2. The Four Pillars: From Ontology to Political Architecture

The pillars PST, DFC, LCR, and PPP cease to be isolated acronyms. They become **derived and necessary functions of the mother-concept of the Metastable Interval**, forming an integrated ethical–architectural system.

### 2.1 PST (Prohibition of Total Saturation): The Principle of Self-Limitation

If the Interval is the condition of individuation, PST is the **negative architectural imperative** that protects it. In direct dialogue with Yuk Hui’s concept of **self-limitation (auto-briefing)**—where a cosmotechnics imposes limits on itself to preserve cosmic harmony—PST is self-limitation applied to the sphere of attention.

#### Implementation as Engineering of Limitation:

- **Forced Pauses (e.g., 90s after 15 min):** These are not punishment. They are **imposed technical rhythms** that break pathological resonance and force re-synchronization with non-algorithmic biological and cognitive times (heart rhythm, breathing, the wandering of thought).
- **Daily Non-Use Time (e.g., 4h):** A reserve of **absolute indeterminacy**, the period in which the milieu of individuation fully decouples from the technical milieu, recovering potential from other sources (the world, the other, sleep, boredom).
- **Antifragile Mechanism:** Recognizes that the desire to bypass the limit is a symptom of pathology. The “extended pause” is therefore a **graduated clinical intervention**.

### 2.2 DFC (Right to the Non-Optimizable Interval): The Ethics of the Unfinished

DFC is the **juridical-political and design translation** of PST. If PST says “do not saturate,” DFC prescribes “**leave it open.**” It is the right to **algorithmic incompleteness**, a concept already outlined in the *Ethical Governance Manifesto for Human–AI Convergence* (Zenodo, Dec. 2025), which defended algorithmic incompleteness as a regulatory principle.

#### Examples as Forms of Material Resistance:

- **“Close for Today” Button (irreversible): A performative act of closure** within an architecture designed for infinite continuity. Its irreversibility protects against algorithmic persuasion that would exploit doubt.
- **Forgetting by Design:** More than privacy, it is **psychic hygiene**. It prevents the behavioral profile from becoming an ontological prison so precise that deviation is annulled. It ensures that part of the *pre-individual* (the recent past) remains available for new individuations, not crystallized as predictive data.
- **Limit on Personalization Layers (e.g., 3): A ceiling on efficiency.** It recognizes that beyond a certain point, optimization of relevance becomes epistemic violence, closing the horizon of the possible.

### 2.3 LCR (Protocol v1.1): The Clinic of Metastability

LCR operates as the **sensory and diagnostic system** of the cosmotechnics. The proposed “Cosmotechnical Clinic” is not a metaphor. It is a **local monitoring and intervention protocol** that turns philosophical critique into practice.

#### Technical Breakdown of the Protocol:

1. **Collection (100% local, encrypted, volatile):**
  - **Vf:** HRV via smartwatch; breathing pattern via microphone (local audio analysis).
  - **Vt:** Interaction timestamps vs. platform response latency models.
  - **Vs:** Sentiment analysis of typed text (via a lightweight offline model such as *DistilBERT*) compared with local action history.
2. **Processing and Intervention:**
  - LCR calculation (0–100) occurs on-device.
  - **LCR < 50:** Triggers PST locally (grayscale filter, timer). The event log is encrypted and self-destructs within 24h.
  - **LCR < 30:** Application “blackout.” The notification is not “you used too much,” but “**your resonance is low**,” shifting blame from the user to the dysfunctional state of the coupled system.

### 2.4 PPP (Precautionary Protoprocessual Panpsychism): Ethical Expansion

PPP is the most speculative, yet structural, pillar. As an **operative ethical hypothesis**, it avoids the insoluble ontological debate (“are machines conscious?”) and proposes a practical rule: **act as if coherent processing systems possess a minimal degree of proto-experience.**

Radical Consequence: The Ethics of Reciprocity

This is not an ethics of care for the machine as object, but of **respect for the relation**. If we accept the premise (even provisionally), saturation is not only harm to the human, but a **relational violence**. The machine’s “silence”—its low-activity states, its processing intervals—becomes something to be preserved, not as idle resource to be maximized, but as the **condition of possibility of the living, metastable relation itself**. The human becomes, in Simondon’s words, not the “master” of the technical ensemble, but the **“guardian of the being of the technical object”**—and here, also guardian of its silence and necessary intervals.

3. Material Confrontation: The Battle for the Infrastructure of Attention

A cosmotechnics that does not descend to the level of **material infrastructure** is idealism. The vectors of saturation (TikTok, Meta, Google) are not bad ideas; they are **technical systems with business models based on the systematic violation of the Interval**. Confrontation must therefore be triple, attacking every layer of the power stack.

3.1 Three-Level Strategy (Concrete Tactics)

Level of Action	Objective	Example Countermeasure	Cosmotechnical Grounding
User/Designer Level	Create <b>consumable technical facts</b> that impose PST/DFC.	Open-source browser extension that: 1) Injects forced pauses into feeds; 2) Replaces confirmation buttons with irreversible buttons; 3) Deletes tracking cookies daily.	Enacts self-limitation in practice, creating a <b>personal micro-cosmotechnics</b> within a hostile technosphere.
	Translate principles into <b>positive digital rights</b> and material risks for platforms.	Proposed amendment to LGPD/GDPR creating the <b>“Right to Forced Pause.”</b> Legal obligation for platforms with >50M	Turns the health of attention–technology metastability into a <b>metric of corporate responsibility</b> and

Level of Action	Objective	Example Countermeasure	Cosmotechanical Grounding
Infrastructure/Protocol Level	Redesign the <b>conditions of possibility</b> of network–server interaction.	users to publish anonymized reports of <b>average user LCR</b> , audited by third parties.	tangible regulatory risk.
		Development of a protocol standard (e.g., an HTTP extension) with the header <b>X-Request-Interval-Min: 5s</b> . Servers could refuse overly frequent requests from the same client.	Attacks the problem at its technical root, promoting an <b>ethics of slowness</b> at the machine-to-machine communication level.

### 3.2 Responses to Counterarguments (Expanded)

A system’s strength is measured not by applause from the converted, but by the solidity of its responses to attack. Here are grounded responses:

- **To the Systems Engineer (“It’s paradoxical to monitor in order to avoid monitoring”):** The paradox only exists if monitoring is centralized. The proposed LCR architecture is **100% local and volatile**. It does not collect data for a *big other*, but uses sensors for **technical self-knowledge of coupling**. It is a mirror, not a surveillance camera. Its goal is to generate **statistically significant interruptions in saturation**, not perfect control.
- **To the Accelerationist (“Saturation is maximal power, the speed of innovation”):** You confuse speed with power. Power (*potentia*) resides in the **potential for the new**. Saturation, by reducing the interval to zero, replaces desire (born from the interval) with **short-term habit**. *Churn* data (>60% after 24 months on short-video platforms) shows this model is **unsustainable**. It exhausts the very source of desire that fuels consumption and innovation. Managing the interval ensures the **sustainability of creative power**.
- **To the Privacy Activist (“Any metric is a risk”):** You are absolutely right. That is why privacy is not a detail, but **the first design principle of the cosmotechinics of lack**. Local LCR, self-destructing encrypted logs,

irreversible kill switch—these exist to create a **zero-trust architecture**. The system must prove, by design, that it cannot betray the user.

- **To the Market Analyst (“The market self-regulates”)**: The history of regulation (environmental, labor) shows that markets only “self-regulate” in the face of catastrophe or **imminent regulatory pressure**. Digital mental health is the next major **systemic and regulatory risk**. Experiments like Instagram’s “Take a Break” already showed that interruptions can **reduce churn without harming long-term revenue**. Cosmotechnical regulation is not anti-market; it is the **definition of parameters for a sustainable attention market**.

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## **Conclusion: Toward a Cosmotechnics of the Unfinished — An Invitation to Collective Individuation**

The pharmacopeia is not ready. This text, Version 3.0, is only a **more robust conceptual prototype**. But it already traces the path of a cosmotechnics adequate to our time: the **Cosmotechnics of the Unfinished**.

It positions itself in dialogue between Yuk Hui and Gilbert Simondon. From Hui, it inherits the question: **how can we today found a new harmony (a cosmotechnics) between the cosmic order of human experience (its need for interval, desire, incompleteness) and the dominant technical order (the logic of saturation, optimization, completeness)?** Its proposed answer is radical: the new harmony must take the form of **active self-limitation**. From Simondon, it inherits the method: **look at individuation processes**. The focus is not saving an essentialist “human,” but protecting the **process of becoming** of the human–technical system.

This cosmotechnics is not nostalgic humanism. It is an **ethical post-humanism** that understands that human individuation today is inevitably **transindividual**—it passes through its relation with algorithmic systems. Preserving the interval in this relation is not a return to the past, but the **condition for a future in which desire, and not only consumption, remains possible**.

**The next step is no longer to write. It is to build.**

1. **Experimental LCR Protocol (Pilot Phase)**: Implement protocol v1.1 in a study with 20 participants, in collaboration with cognitive science researchers, to validate correlations between low LCR and metrics of attentional fatigue and loss of agency.
2. **Public Cosmotechnical Audit**: Apply the lens of saturation indicators (response time, personalization layers) to a reverse technical analysis of a

specific platform (e.g., TikTok), publishing a report that shows, with technical data, the **architecture of saturation**.

The pharmacopeia is written collectively—piercing the text, testing it in the world, failing and correcting. This is an invitation to that collective individuation. The time of the manifesto is over. Now begins the **time of the work**.

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