

Sufficient Conditions for Anti-Admissibility via Composed Ritual and Cryptographic Resistances in Spherepop Pop Regimes

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November 10, 2025

Abstract

In the Spherepop calculus, anti-admissible spheres resist integration into the Technological Society’s pop closure by rendering merge operations undefined or cost-prohibitive. This paper establishes sufficient conditions for anti-admissibility when ritual (temporal-embodied) and cryptographic (computational-hardness) resistances are composed. We model pop attempts as probabilistic processes over a regime defined by adjacency, cost functions, and optimization parameters. Under superadditive interaction, we prove that spheres achieving minimal thresholds in ritual duration and cryptographic entropy ensure pop failure probability approaching 1, even against adversarial initiators with bounded resources. Implications for constructing durable non-flattening domains are discussed.

1 The Technological Society as a Pop-Optimizing Regime: Ellul’s Structural Thesis

Jacques Ellul’s *The Technological Society* (1964) presents Technique not as a collection of machines or policies, but as a total ordering operator over the entirety of social space. This operator enforces a preference relation defined by the maximization of efficiency, equivalently the minimization of friction, ambiguity, irreproducibility, and unstandardized context. Technique is not selected by deliberate human choice; rather, it selects organizational schemas by out-competing alternatives across all articulable domains.

Ellul identifies five structural properties that render Technique a universal attractor:

1. **Autonomy:** Technique evolves according to its internal logic, independent of human intention.
2. **Unity:** Discrete techniques interlock into a single, interoperable system.
3. **Universality:** Technique extends to every domain susceptible to measurement, rationalization, or optimization.
4. **Automatic selection:** The most efficient technique eliminates competitors through inherent competitive advantage.
5. **Irreversibility:** Inefficiencies, once displaced, cannot be reintroduced without systemic collapse.

These properties prefigure the Spherepop calculus: a regime that systematically rewards merge operations reducing boundary entropy while penalizing unmergeable internal structures.

2 Technique as Flattening, Compression, and Semantic Dropout

Technique does not expand in the manner of imperial growth; it flattens heterogeneous domains into a uniform, interoperable substrate. Only formally comparable properties persist post-transformation. Table 1 illustrates this compressive action across domains.

Domain Before Technique	Domain After Technique
Medicine as care	Medicine as protocol
Education as formation	Education as credentialing
Law as judgment	Law as procedure
War as ideology	War as logistics
Work as craft	Work as process optimization
Community as relational	Community as network graph

Table 1: Flattening transformations under Technique.

In each instance, internal semantic density yields to external interface consistency. What endures is not intrinsic meaning but mergeability. Technique is thus compressive: it discards semantic residue not through prohibition, but through structural irrelevance in optimization criteria.

Human interiors—moral arguments, sacred boundaries, craft lineages, apprenticeships—fail not due to explicit opposition, but because they lack representation in efficiency metrics. Decision criteria shift from human deliberation to algorithmic optimization, rendering prior values inexpressible without competitive disadvantage.

Technique propagates without central agency: local optimizations aggregate into global coordination. No actor directs the process; each participant advances it inadvertently. Resistance, when articulated technically (e.g., via laws or optimized dissent), accelerates incorporation.

Efficiency functions as selection pressure rather than explicit goal. Inefficient forms do not persist because they are undesired, but because they cannot coexist in the shared environment. The system closes by defining its own evaluation criteria, applying them universally, and excluding non-interoperable alternatives from viability.

Freedom, in Ellul’s analysis, is unexpressed due to ontological mismatch: it possesses no interface, metric, or selective edge within the regime. The central unresolved question is whether this closure assumes an exhaustive merge algebra—specifically, that all feasible pops are flattening and efficiency-maximizing.

Spherepop challenges this by positing alternative operators (non-flattening or boundary-expanding pops), intentional anti-admissible designs, and composable resistances. Among resistance families, ritual and cryptographic mechanisms are prioritized for their temporal irreducibility, binary verification, and non-compressibility—properties Ellul could describe intuitively but not formalize.

The mathematical objective thus emerges: identify sufficient conditions under which a sphere resists pop-assimilation, even against resource-bounded adversaries in the dominant regime.

3 Model of Composed Pop Attempts