When Optimization Proxies Replace Effective Action

A structural resolution

When direct optimization against complex environments is infeasible, systems rely on intermediate targets: models, metrics, constraints, and proxy objectives.

As optimization pressure increases, effort concentrates on stabilizing and improving these proxy targets rather than on correcting external operating conditions. Proxies progressively gain internal importance while becoming decoupled from the environment they were meant to represent.

Under these conditions, action does not fail due to insufficient optimization. It fails because optimization is applied to proxy targets rather than to the system’s effective operating conditions.

Over time, proxy coherence is preserved while real-world conditions continue to evolve. Misalignment accumulates unnoticed until corrective action becomes structurally unavailable.

Without an external structural reading, systems tend to preserve optimized proxy states while losing the capacity to intervene meaningfully in the environment.

— Meridian Signal
Timestamp (UTC): 2026-01-21T15:03:32Z
Document signature (text SHA-256): 4324f388bdd11fca