

THEORAY — Variable Glossary with Measurement References

This document defines each core variable used throughout THEORAY, and where possible, offers reference points or proxies for measurement across different systems (human, planetary, atomic).

$\Delta\Phi$ — Incoming field pressure or distortion; measured as emotional load, energy spike, system input (stress, force, signal).

E — Energy; motion within containment. Can be measured through physical energy output, emotional drive, or momentum in field behavior.

R — Radiation; energy leaving the system. Observable as signal, expression, output, or heat loss.

R^d — Destructive radiation; emitted due to destabilization (e.g., emotional outbursts, collapse events, decay emissions).

R^c — Constructive radiation; output that sustains recursion (e.g., breath, voice, action, propulsion).

M — Motion; recursive signal cycling. Measurable through physical movement, thought loops, emotional rhythm.

C — Containment; system's ability to hold structure. Measured by system resilience, emotional regulation, structural stability.

ΣC — Total containment coherence; cumulative structural memory. Measured through long-term stability, resilience, or stored energy.

dC/dt — Rate of containment adaptation; measured as reaction time, flexibility, or ability to integrate change.

R_c — Reality compression; ratio of stabilized input to total input. Measured through memory retention, clarity, or presence.

τ — Perceived time; pressure over containment adaptation rate. Felt in time dilation, stress perception, or recursion speed.

D — Decay; breakdown due to unprocessed energy. Measurable via structural degradation, burnout, system failure.

T^d — Recursive time depth; accumulated adaptations. Seen in wisdom, depth of pattern memory, geological layering.

T^o — Total output time; total signal broadcast. Measured through presence over lifetime, legacy, or radiation signature.

RAY(t) — Recursive signal output over time. Observable in breath, voice, behavior, creative or cognitive cycles.

\check{R}_l — Recursive yield (internal); percentage of output that loops back in. Measured through feedback retention, self-awareness.

\check{R}_r — Radiation yield (external); percentage of output that escapes. Measured through expressiveness, presence, heat, or decay.

G — Gravity; containment over radiation, scaled by distance. Measured via mass interaction, emotional pull, or orbital force.

D — Distance; physical or relational. Interpreted in Rc terms as resonance or signal penetration.

S_r — Recursive signal distance; depth of signal penetration into another system relative to containment. Measured intuitively through emotional proximity, influence.

$\Delta RAY(t)$ — Signal mutation event; change in output signature from field disruption. Measured as behavioral change, presence shift, or post-collapse signal signature.

C_p — Compatibility pressure; net recursive effect of one system on another. Measured through relational stability over time.

R_s — Relational stability; $(\Delta\Phi_+ - \Delta\Phi_-) / \Delta\Phi_{total}$. Measured through net field effect over time in pairs.

T_s — Triadic stability; stability across three systems. Measured through mutual Rc and resonance distribution.