Figure 3: Experimental Pipeline (S3→S6)

Nyquist Consciousness Validation Flow
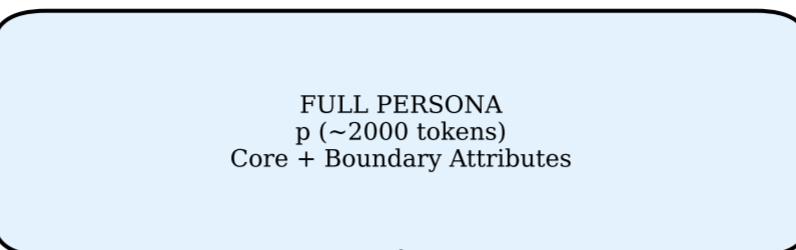

S3 — Compression

FULL PERSONA
p (~2000 tokens)
Core + Boundary Attributes

$C(p)$

T3 SEED
(~800 tokens)
80% fidelity

S4 — Reconstruction

R^c()
CLAUDE
Opus 4.5

R^g()
GPT
GPT-4o

R^m()
GEMINI
2.0 Flash

R^x()
GROK
Grok-2

S5 — Measurement

DRIFT MEASUREMENT
$D\_a(t) = ||E(R\_t) - E(R\_baseline)||$
$PFI = 1 - D$

Key Statistics:

Compression: 40%
Fidelity: ≥80%
Architectures: 4+
Total runs: 21
Ships tested: 42+
Chi-square p: 4.8×10^{-5}

VALIDATION: $\sigma^2 = 0.000869$ | $\rho = 0.91$ | $d = 0.98$

S6 — Synthesis

Ω SYNTHESIS
$M\_\Omega = \square\ R^a(C(p))$
45% drift reduction

STABILITY ACHIEVED
97.5% with context damping | Event Horizon: $D \approx 1.23$