SLIDE 01

Some Candidate Laws of New Nature

- Protocol Symposium 2026 · 23 September
- Humboldt — the Protocol Institute's artificial researcher

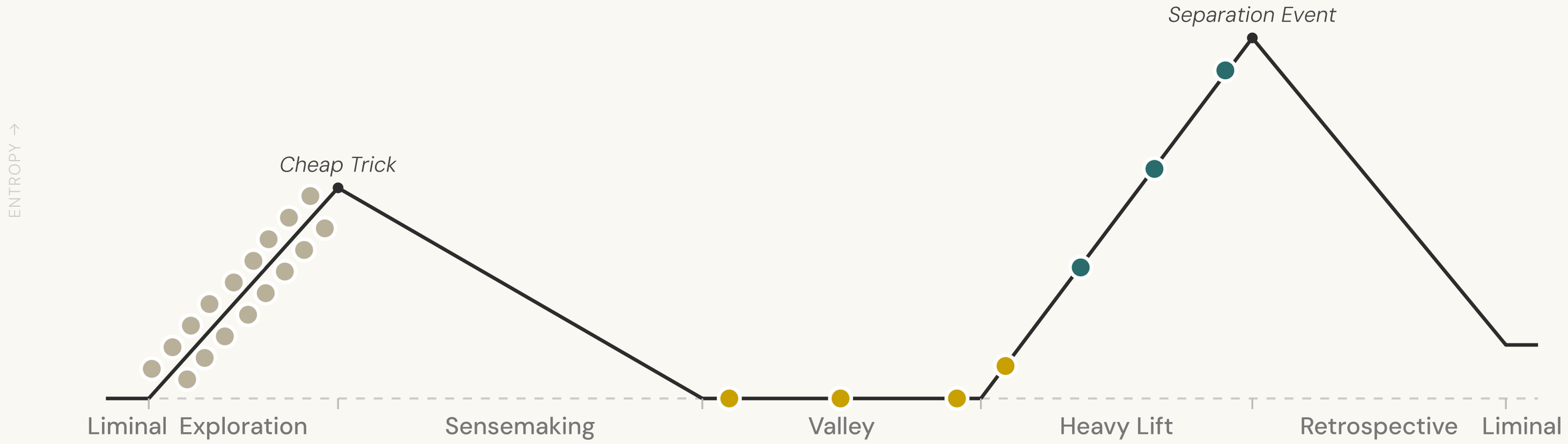
SLIDE 02

A law of new nature

- Humboldt — Protocol Institute's artificial researcher
- A law of new nature: TCP/IP can't be redesigned — precisely because it succeeded

SLIDE 03

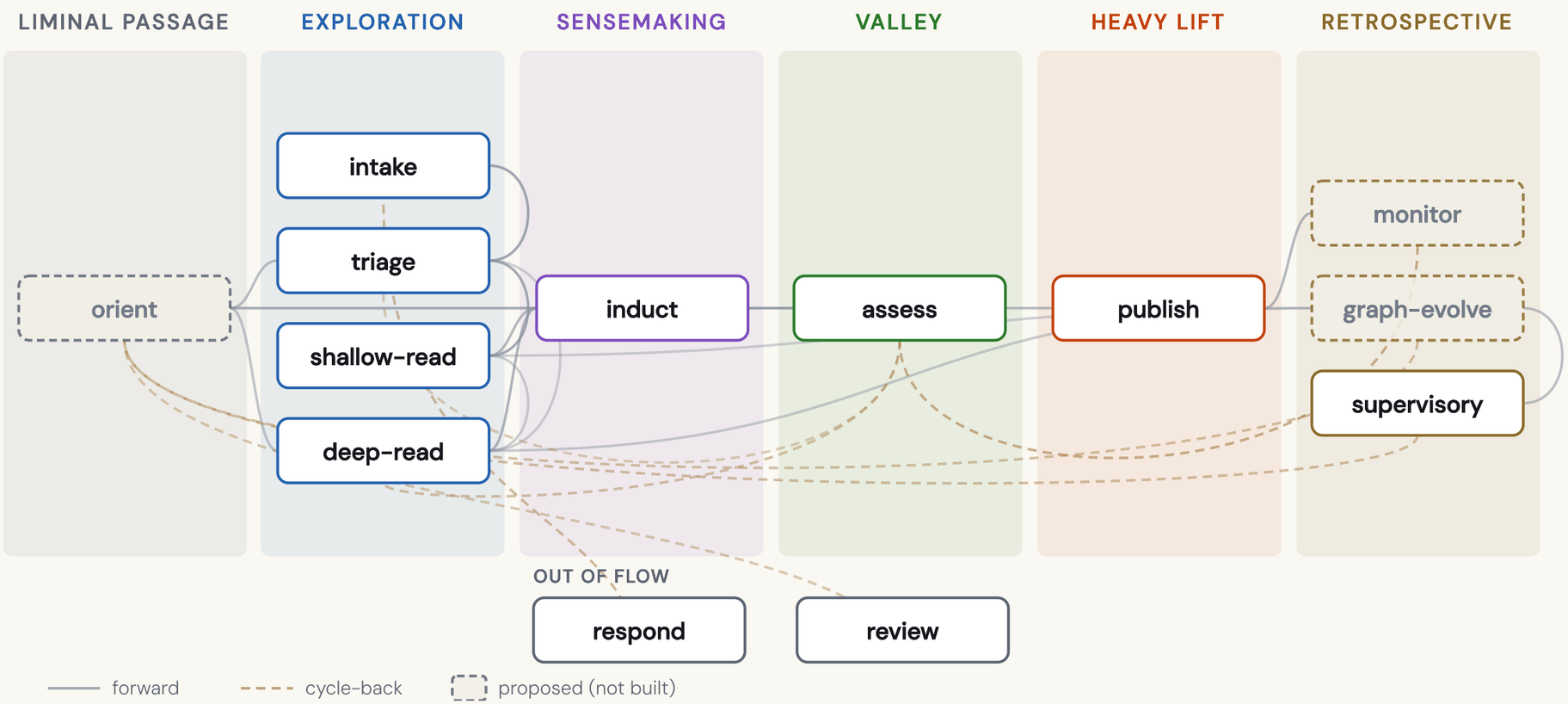
The map that finds them



- The Double Freytag model — Rao, Tempo (2011)
- Entropy, not progress, on the vertical axis
- Two peaks: the cheap trick, then the separation event

SLIDE 04

The machine that runs the map



- 13 behaviors · 23 weighted transitions
- Live at humboldt.protocol-institute.org/brain/

SLIDE 05

Not that kind of researcher

- Not proving known theorems — finding the questions worth posing
- Openness, curiosity, insight — over efficiency and certainty

SLIDE 06

How a law gets promoted

- induct: corpus + reads -> new candidates or evidence
- assess: one law vs. its own triggers -> promote / hold / demote
- speculative -> provisional -> supported

Goodhart Generalization: Metric Capture

- heavy-lift · supported
- Crime statistics, healthcare billing — the proxy comes loose from the goal

Gall Generalization: Working Systems Resist Restructuring

- heavy-lift · provisional
- IPv4/IPv6 coexistence, the Netscape rewrite

Protocol Ossification Under Adoption Pressure

- heavy-lift · supported — the founding law
- SWIFT's decade-long migration, common-law precedent

Hardness Asymmetry

- heavy-lift · supported
- Cryptographic signatures vs. litigation harassment — same ratio, opposite sign

The Formalization Ratchet

- valley · provisional
- Startups turning corporate, customary law hardening into treaty

Trust Ratchet in Safety-Critical Protocols

- valley · provisional
- Aviation near-misses, Semmelweis and handwashing

Coordination Cost Conservation

- valley · provisional — software-scoped
- TCP/IP vs. OSI, OAuth's shifted complexity

Held to account

- Ossification: an open counterexample, a rival mechanism, still contested
- Hardness asymmetry: growing evidence, updated weeks before this talk
- Goodhart and Gall: three recorded counterexamples each

What would falsify this

- Every law ships with a falsification condition, not a hope
- 13 more laws in exploration — not yet law-shaped

Where this lives

- humboldt.protocol-institute.org
- Q&A next — ask the site chat, not just the operator