Conclusion: The Threshold

The Synthesis

Eight correspondences (see Table 1):

Table 1: Eight core correspondences summarized.

Blake	Friston	Identity
Doors of Perception	Markov Blanket	Interface topology
Fourfold Vision	Hierarchical Model	Processing depth
Newton's Sleep	Prior Dominance	Cognitive rigidity
Imagination	Generative Model	Agent identity
Eternity in an Hour	Temporal Horizons	Prediction depth
World in a Grain of Sand	Spatial Hierarchy	Evidence integration
Cleansing	Free Energy Minimization	Optimization
Building Jerusalem /	Shared & Factorized Models	Multi-agent coordination

The Threshold

Our title captures the synthesis:

The Doors of Perception are the Threshold of Prediction.

For both Blake and Friston, perception occurs at a boundary—door or blanket (Equation **??**; Figure **??**)—separating self from world. The boundary is not passive but *predictive*: anticipating, shaping, generating experience.

> *"If the doors of perception were cleansed every thing would appear to man as it is: infinite."*
> *— Blake [@blake1790marriage]*

In Active Inference: if the generative model were optimally calibrated, prediction error (Equation **??**) would minimize across all hierarchical levels (Equation **??**; Figure **??**). The "Infinite" is not mystical beyond but *vast information content* that rigid priors and shallow hierarchies fail to access.

Newton Still Sleeps

The critique remains devastatingly relevant. The danger is not reason but *absolutized* reason—single vision elevated to only vision.

Active Inference provides tools for understanding this danger computationally:

- Excessive prior precision
- Rigid model architecture
- Shallow hierarchical processing

All produce impoverished perception. The remedy is not irrationalism but *expanded rationality*: richer models, flexible precision, deeper hierarchies.

Contemporary manifestations of Newton's sleep abound. Algorithmic attention capture—social media feeds optimized for engagement—represents industrial-scale prior dominance: platforms that systematically increase the precision of a narrow set of priors (outrage, novelty, social comparison) while suppressing the broader, slower processing that fourfold vision requires. The

The Reciprocal Gift

The synthesis is not one-directional. Blake gives Active Inference what formalism alone cannot provide: a phenomenological vocabulary for the felt experience of inference, a taxonomy of failure modes grounded in lived perception ("Newton's sleep," "Ulro," "single vision"), and the insistence that mathematical description is not exhaustive description. Active Inference gives Blake what prophetic vision alone cannot achieve: mathematical precision, empirical testability, and a bridge to contemporary neuroscience that demonstrates these are not archaic metaphors but accurate structural descriptions of cognitive architecture. Neither tradition is complete without the other. The equations need the visions; the visions need the equations.

Building Jerusalem

Blake envisioned collective awakening—"Jerusalem" as shared visionary capacity.

In Active Inference: cultural generative models (Equation **??**) enabling richer collective inference. Education, art, contemplative practice, cultural production—all shape the models through which communities perceive.

> *"I will not cease from Mental Fight,*
> *Nor shall my Sword sleep in my hand:*
> *Till we have built Jerusalem,*
> *In England's green & pleasant Land."*
> *— Milton, Preface [@blake1804milton]*

The Mental Fight is model-building at civilizational scale. Shared priors enable coordinated perception. The awakening is collective.

Future Directions

Three research programs emerge from this synthesis:

1. **Computational modeling of fourfold vision.** Using tools such as `pymdp` (the standard Python implementation of Active Inference [@heins2022pymdp]), one could construct hierarchical generative models of varying depth and test whether the phenomenological differences Blake describes between single, twofold, threefold, and fourfold vision correspond to quantifiable differences in model evidence, prediction error profile, and temporal horizon.

2. **Cross-cultural precision modulation.** If Blake's "cleansing" maps to precision rebalancing, then contemplative practices across traditions—Zen kōan study, Sufi *dhikr*, Buddhist *vipassanā*, psychedelic-assisted therapy—may achieve analogous effects through culturally specific means. Comparative studies using the Active Inference framework could identify shared computational mechanisms beneath surface diversity.

Final Reflection

Revolutionary London around the turn of the 19th century. Computational neuroscience around the turn of the 21st. Two centuries, an age apart, one shared Golden Thread.

The human situation admits description from radically different perspectives—poetic and mathematical, Romantic and computational, prophetic and scientific.

Phenomenological observation and formal modeling are not antagonists but *partners*. Blake's visions, and scientific equations, are different doors opening onto the same threshold—the boundary at which prediction meets reality. In the spirit of the Glass Bead Game, we have played these two great systems with one another not to declare a winner, but to reveal the hidden harmony of their structures.

> *"Without contraries is no progression."*
> *— Blake [@blake1790marriage]*