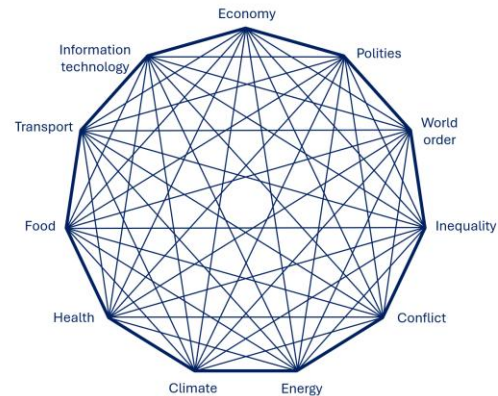![CASCADE INSTITUTE]

POLYCRISIS CORE MODEL v2.5
Summary of results

Thomas Homer-Dixon, August 4, 2025

Humanity is experiencing a rising frequency of near-simultaneous, apparently entangled crises—a situation many scholars and policymakers are calling the "global polycrisis." But we don't really understand the causal mechanisms driving this phenomenon, so we can't adequately foresee the dangers and opportunities it creates for humanity.

To improve our understanding, the Cascade Institute has built a detailed model of the human global "system of systems." Called the **Polycrisis Core Model** (PCM), it uses cross-impact balance analysis to mathematically integrate an enormous number of qualitative judgments about the causal relationships among 11 constituent global systems. It then predicts the entire global system's future states.

PCM v2.5 creates over 4 million unique representations of world outcomes in 2040. But only three outcomes represent highly stable states of the world—ones that could persist and are thus probable. (See figure on next page.) In complexity-science terminology, these three outcomes are "attractors." Each has a property much like gravity that attracts other, less-stable and less-probable states.

The largest of the three, which we call the "Illiberal Decline" attractor, represents a future of poverty, inequality, authoritarianism, violence, and environmental degradation. It acts like a huge cosmological black hole, with its gravity sucking in over three million of the model's 4 million other possible outcomes. Another attractor, which we call "Mad Max," is also large; it represents thoroughgoing social, economic, and environmental collapse and deeply entrenched human misery.

But our model also generates one additional stable scenario that's remarkably good. It's comparatively tiny but highly stable, and it entails an enormous improvement in human wellbeing. It has strong democracy, competent governance, guided economic growth, relative economic equality, sustained technological innovation, and declining environmental impact. We call this scenario the "Hope attractor."

We believe the Hope attractor's existence as a possible future for humanity is a finding of great significance.

The Cascade Institute is using the PCM platform to discover feasible pathways away from humanity's current circumstances (marked by an X) towards the Hope attractor.

Polycrisis Core Model 2.5, main attractors, 2040

Material wellbeing →

Hope
attractor

Humanity is
currently here

X

Illiberal
decline
attractor

Mad Max
attractor

Bubble area indicates relative attractor size

Social wellbeing→