

Epigenetic Social Systems

Human Systems, Intelligent Artificial Actors,
and Generative Ethics

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The logo features the text "RSCA IN 5" in white, with "RSCA" on the top line, "IN" in the middle, and a large "5" on the bottom line. The text is set against a background of concentric, semi-transparent blue circles. A thick, curved yellow and orange arc is positioned to the left of the text, partially overlapping the circles.

RSCA
IN
5

Origins: Propensities, EpiGenetic Social Systems

PhD, Distributed AI: Argumentation, Consensus, Cooperation (among robots)

20 years mapping very complex, high-stakes human systems

- *Explanation, forecasting, risk-advised planning and decision-making, and design*

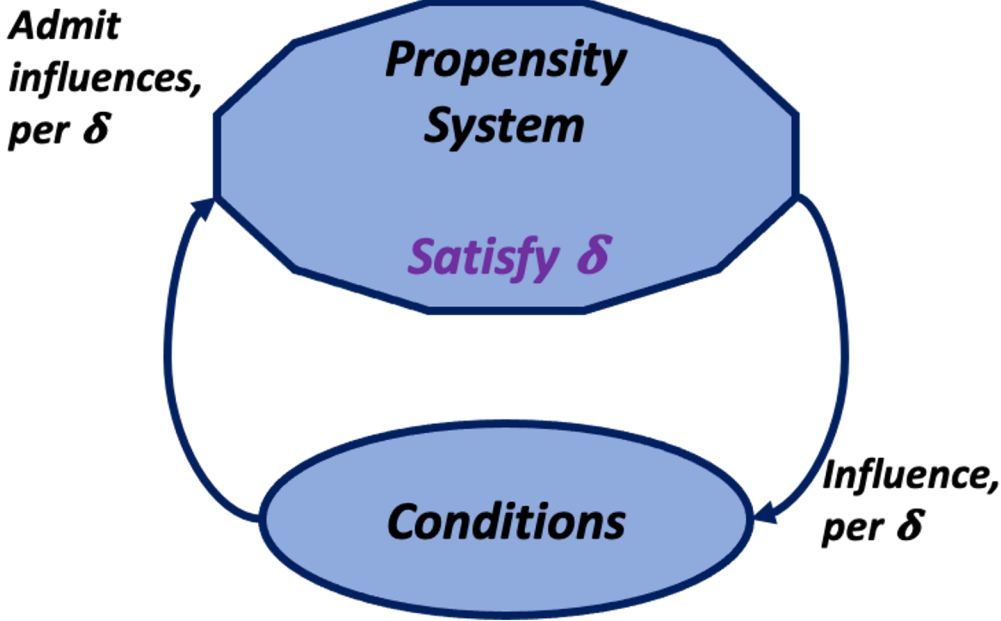
AI and Ethics 'Conclave' ... Consciousness, IBM Watson, Markkula





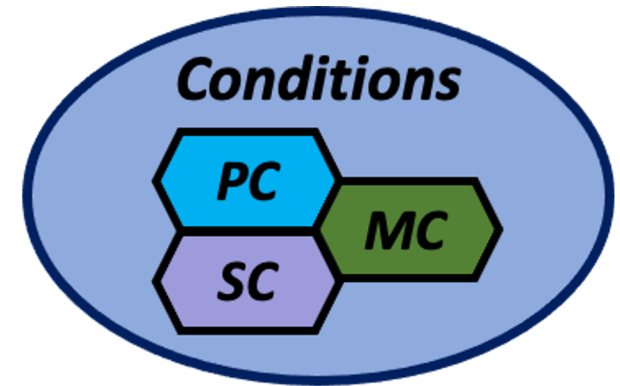
Propensities: Key Motivating Phenomena

- Generative*
- Persistent*
- Circumscribed*
- Cybernetic*
- Criterial*
- Composable*
- Micro-learning*
- Creative*





Three Categories of Conditions



Physical: the lawful physical universe

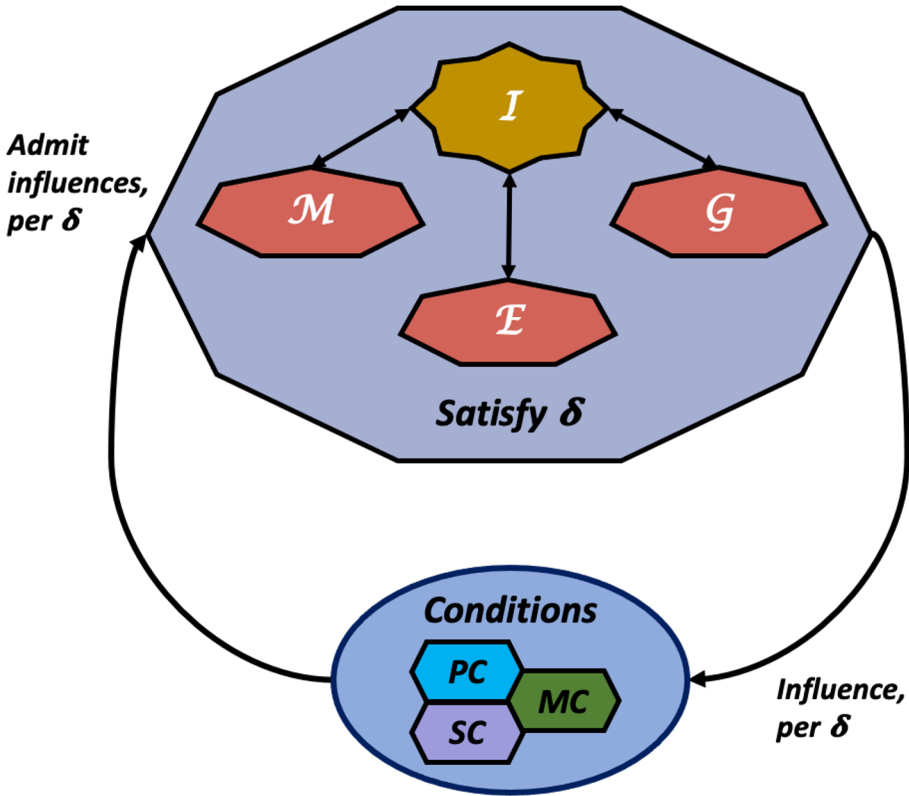
Social: recurring schemata, roles, identity, other-actor construals

Mental: affect, perceptions, recollections, stages of deliberation, identity

A role for machine learning technology -- detect conditions

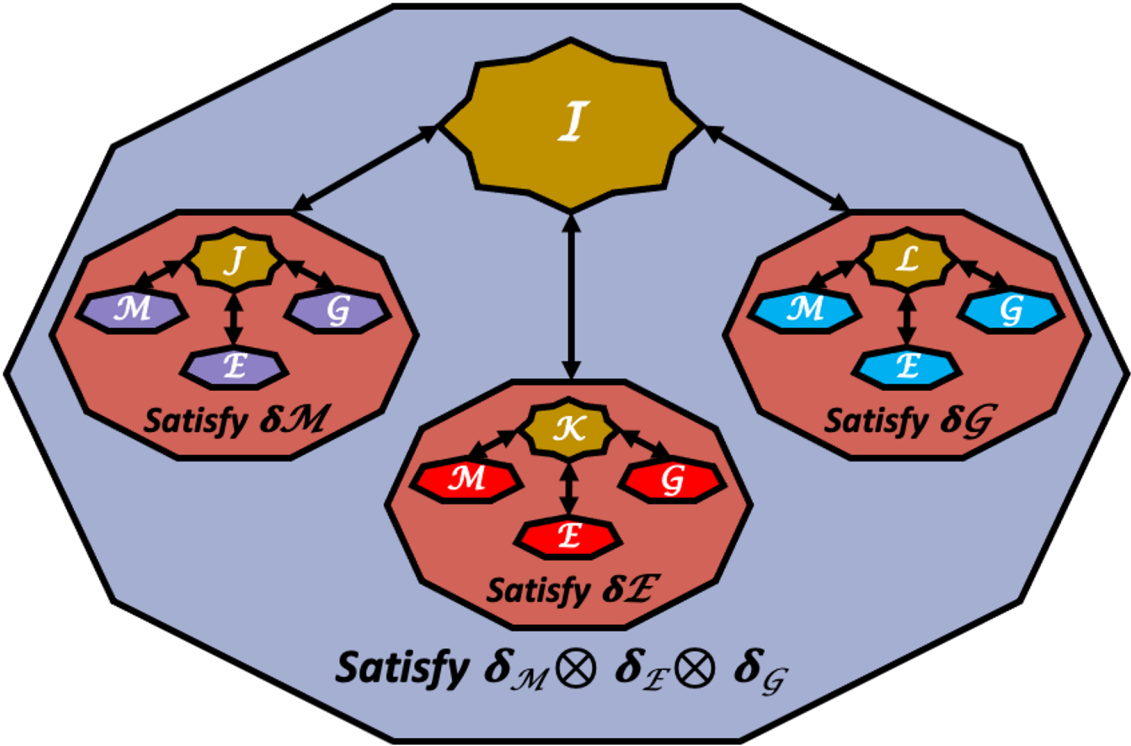


Monitor, Evaluate, and Govern ... or, observe, deliberate, perform





Recursion, Self-Organization



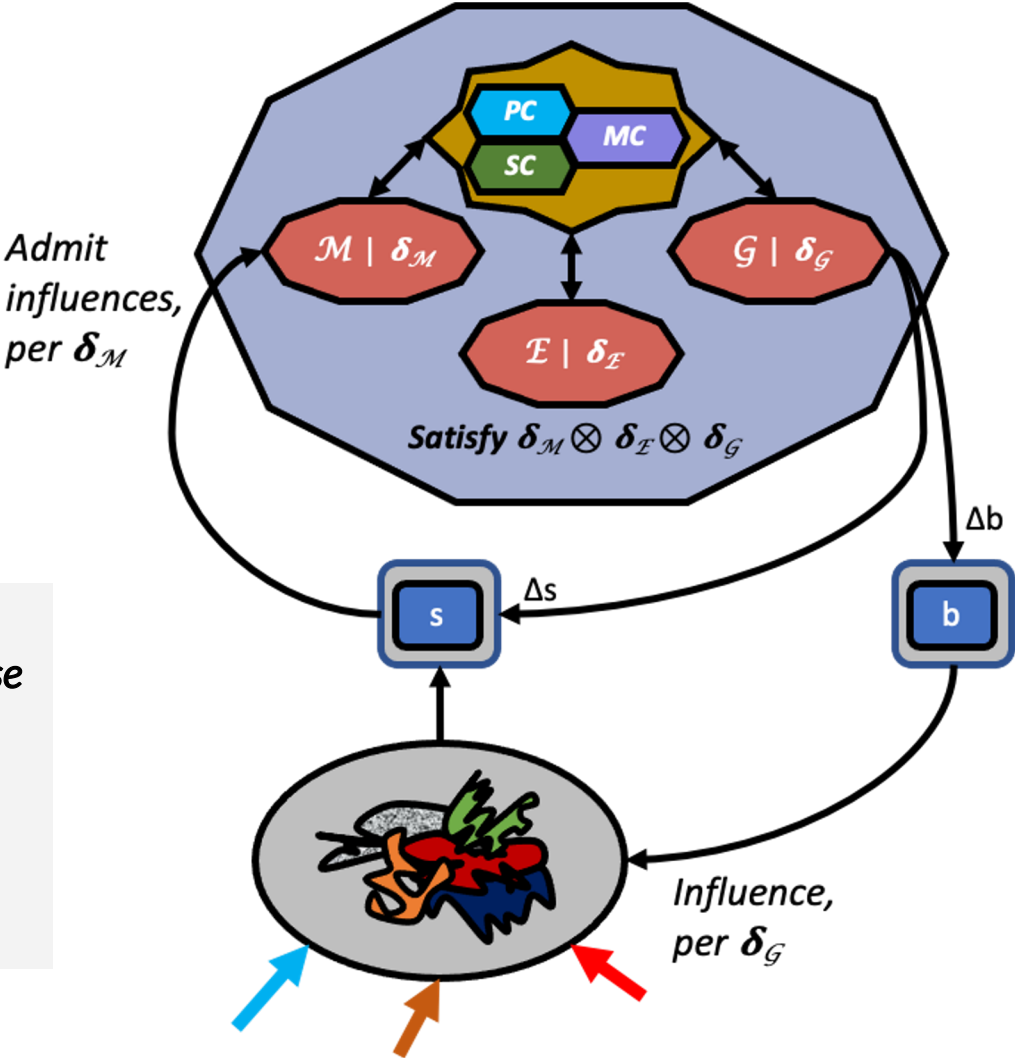
... also, assemblies and executive functioning



Actors (Human, IAA) Engage the World Through Phenomena

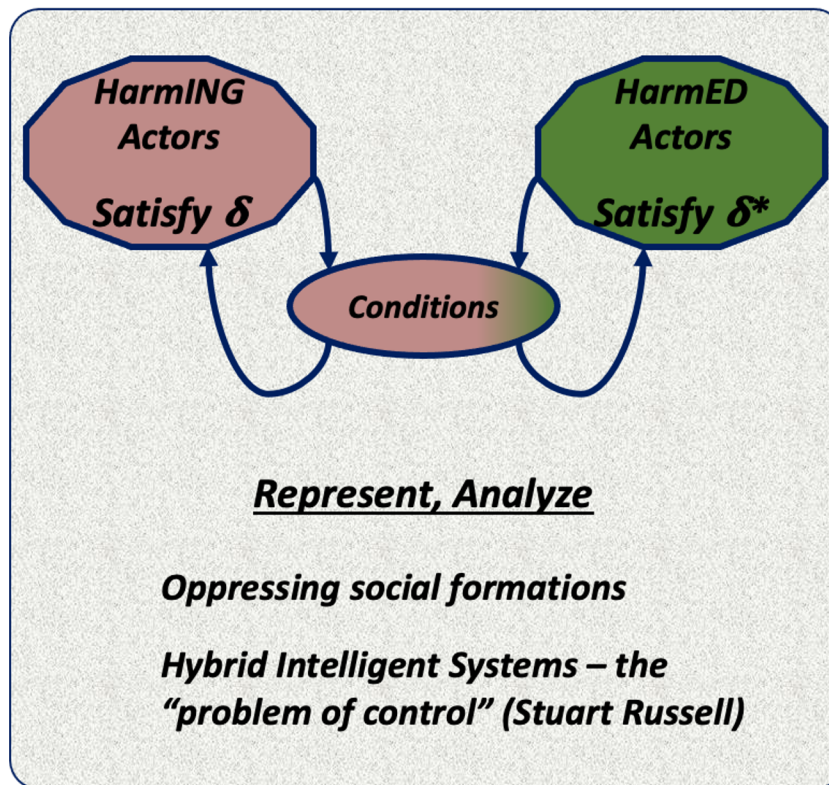
Actors influence others by influencing phenomena those others are sensitive to

- ... mimesis
- ... habitas





Generative Ethics, or, Ethics as Skill: Harm and Flourishing in Propensity Systems



The Generative Ethics Program

Map recurring predicaments (no-win choices)

Identify causal sources (actors, institutions; generative axioms)

Critique (normative) per cross-cultural virtues (Shannon Vallor)

Design learning path to flourishing system



Appendix: Notes on Criteria

Setpoints, temporal orderings, quantity/quality measures

Well-fitting participation, imputed roles of others

Complexity, sufficiency, aesthetics, morality

Introduce/remove, increase/decrease, protect/prevent

Homeostasis, equilibration, epigenesis