ACM GreekCHI-CYCHI Symposium 2026

Designing Generative Friction: Retaining Human Sensemaking and Epistemic Governance in AI-Augmented Design Practice

Rodrigo Pérez-Zúñiga & Beatriz García-Prósper
Doctoral Researcher PhD Supervisor

Support

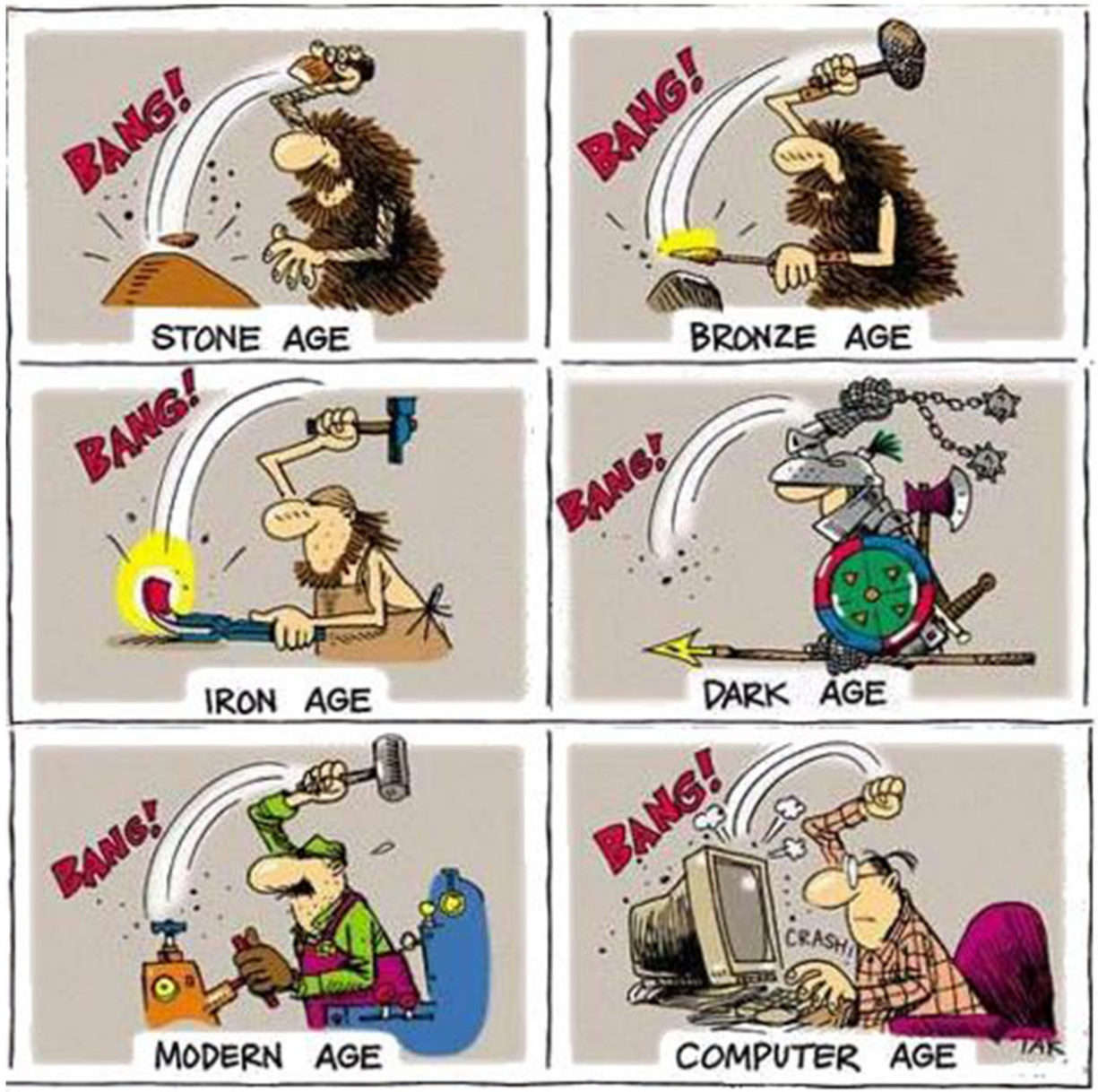
UNIVERSITAT POLITÈCNICA DE VALÈNCIA
Universidad de Antofagasta
IGD. Grupo de Investigación y Gestión del Diseño
departament de Dibuix Universitat Politècnica de València
El poder de una idea Diseño Estratégico



1

Strategic Design:
Dynamic organizational capability for problem-framing.

(Biel et al., 2025; Dorst & Watson, 2023).

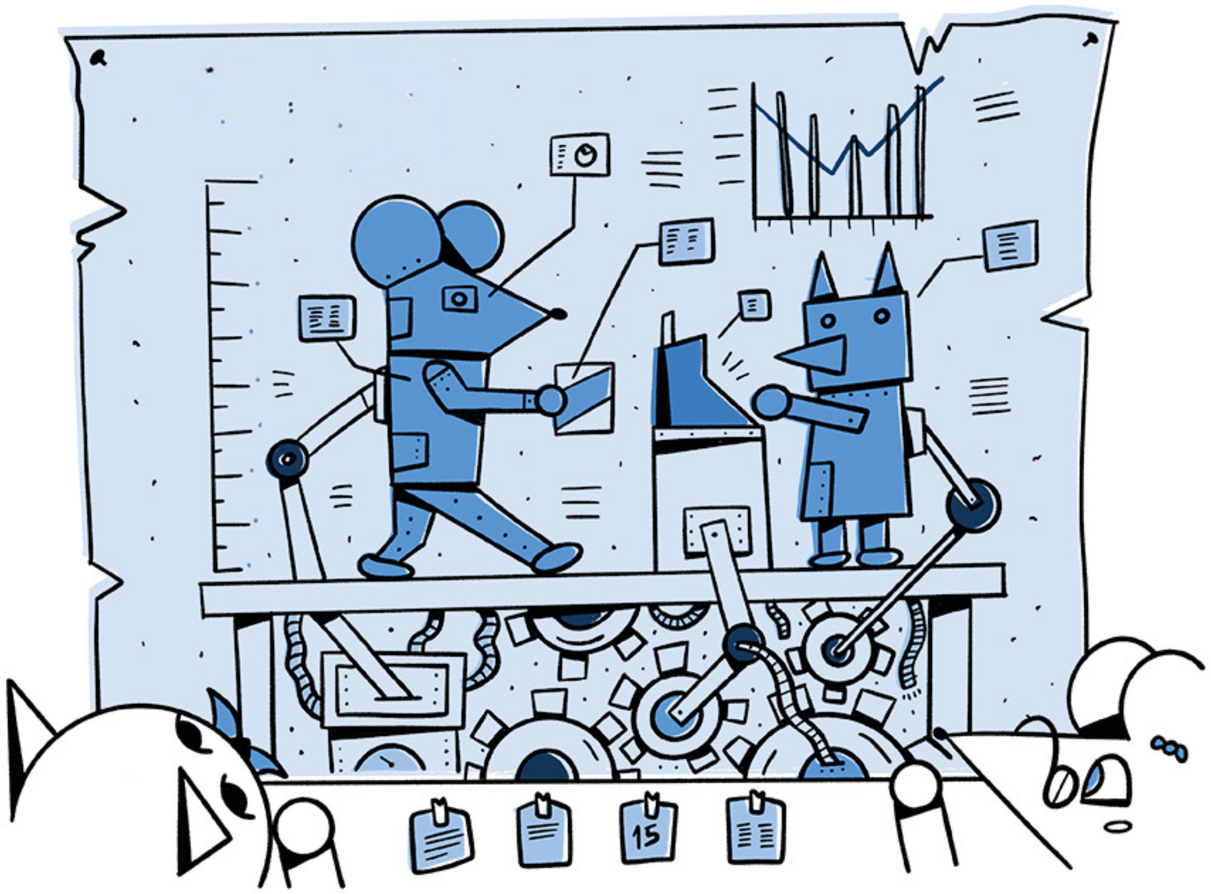


"Nothing can stop automation" Thach Bui, TAK.

2

Technological Discontinuity:
Shift from passive decision-support tools to autonomous semantic synthesis.

(Haefner et al., 2021; Li et al., 2026; Vallé et al., 2026).

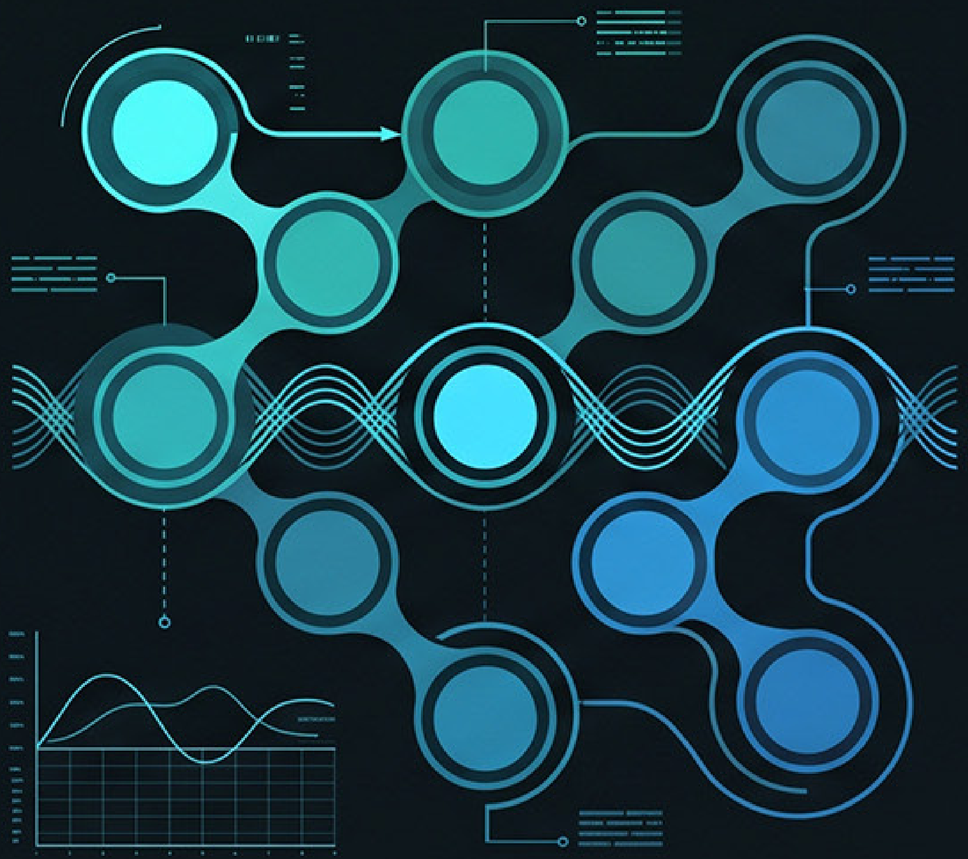


“Blueprint analisis” - elpoderdeunaidea, Rodrigo Pérez.

3 **The Focus:** Strategy collapses into the micro-interaction between human judgment and algorithmic interfaces.

(Verganti et al., 2020).

Research Problem: Frictionless Interaction vs Critical Sensemaking



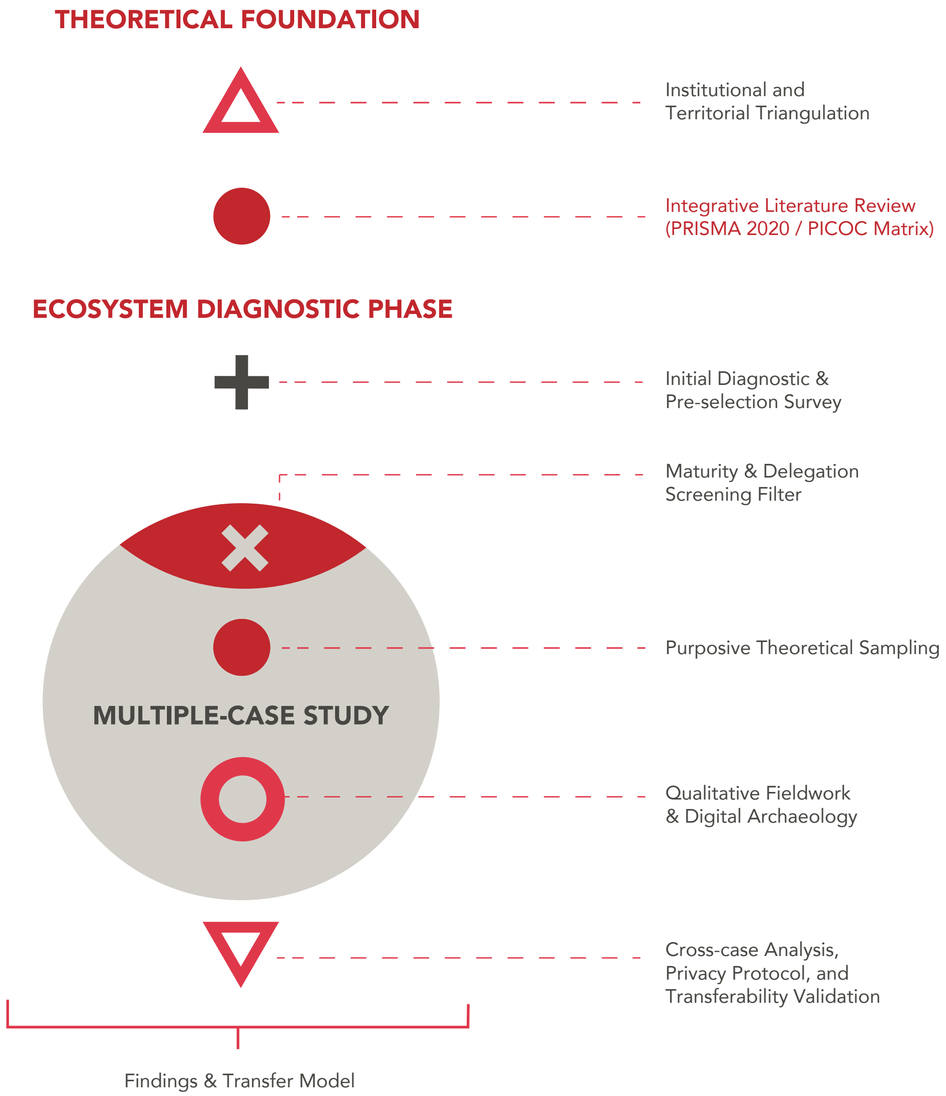
The Industry Paradigm (Calm Computing):

- Frictionless interfaces minimizing operational load
- Incentivizes fast, automatic heuristic processing (System 1)

The Cognitive & Strategic Risks

- **Managerial overreliance:** Conflating formal fluency with contextual validity
- **The “Shallow Edit Mode”:** Passive acceptance of probabilistic outputs
- **Strategic Homologation:** Loss of differentiated market variance

Research Scope & Core Inquiries



- **Primary Objective:**
  Analyze and validate how design teams apply deliberate human judgment to govern stochastic AI outputs.

Research Questions:

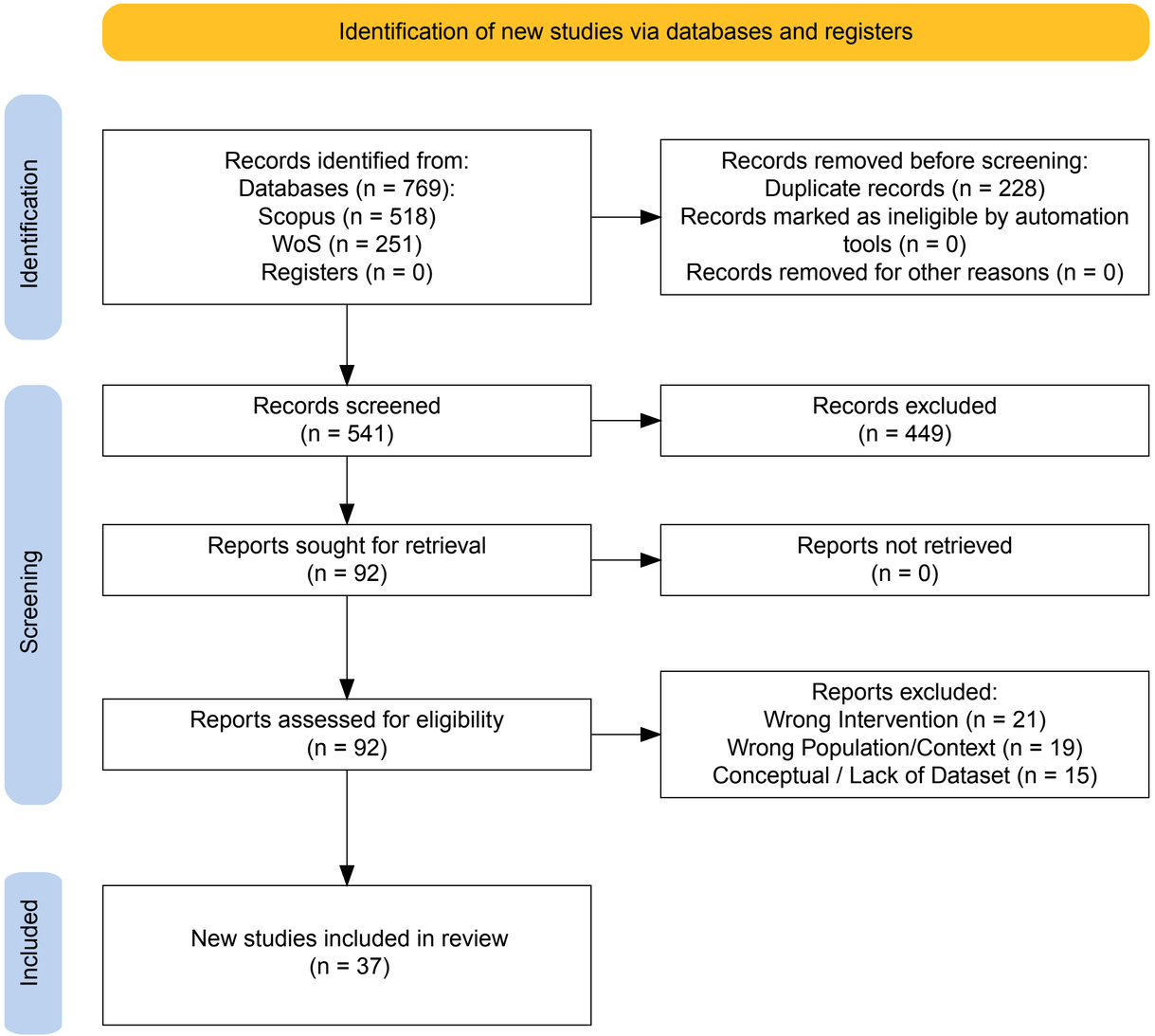
RQ1 (Cognitive Impact):
How does the interactive hyper-fluency of Generative AI alter cognitive agency and sensemaking in real-world environments?

RQ2 (Interaction Mechanisms):
What human-computer interaction (HCI) mechanisms interrupt heuristic processing to establish effective decision governance?

- **Core Thesis:**
  Procedural resistance is not a usability flaw; it functions as a necessary cognitive scaffold.

Methodological Framework: Integrative Literature Review

(PRISMA 2020 / PICOC Matrix):



Boolean equation

strategic design" OR "design thinking" OR "design management" OR "innovation management") AND ("artificial intelligence" OR "generative AI" OR "algorithm*") AND ("governance" OR "sensemaking" OR "decision making" OR "human-in-the-loop" OR "agency" OR "epistemic

PICOC Matrix

Population: Decision-makers, strategists, and product design leaders (excluding operational operators).

Intervention: Generative & Agentic AI post-2022 (excluding legacy predictive machine learning).

Context: Startups, SMEs, and corporate innovation ecosystems.

Thematic Findings: Cognitive Atrophy & Governance Gaps

1

Micro-Cognitive Level:
Equalization of technical outputs masked by **managerial overreliance**; severe drop in concept originality

(Hettrich et al., 2025; Keding & Meissner, 2021).

2

Meso-Organizational Level:
Shared historical data corpora push innovation portfolios toward structural **convergence**

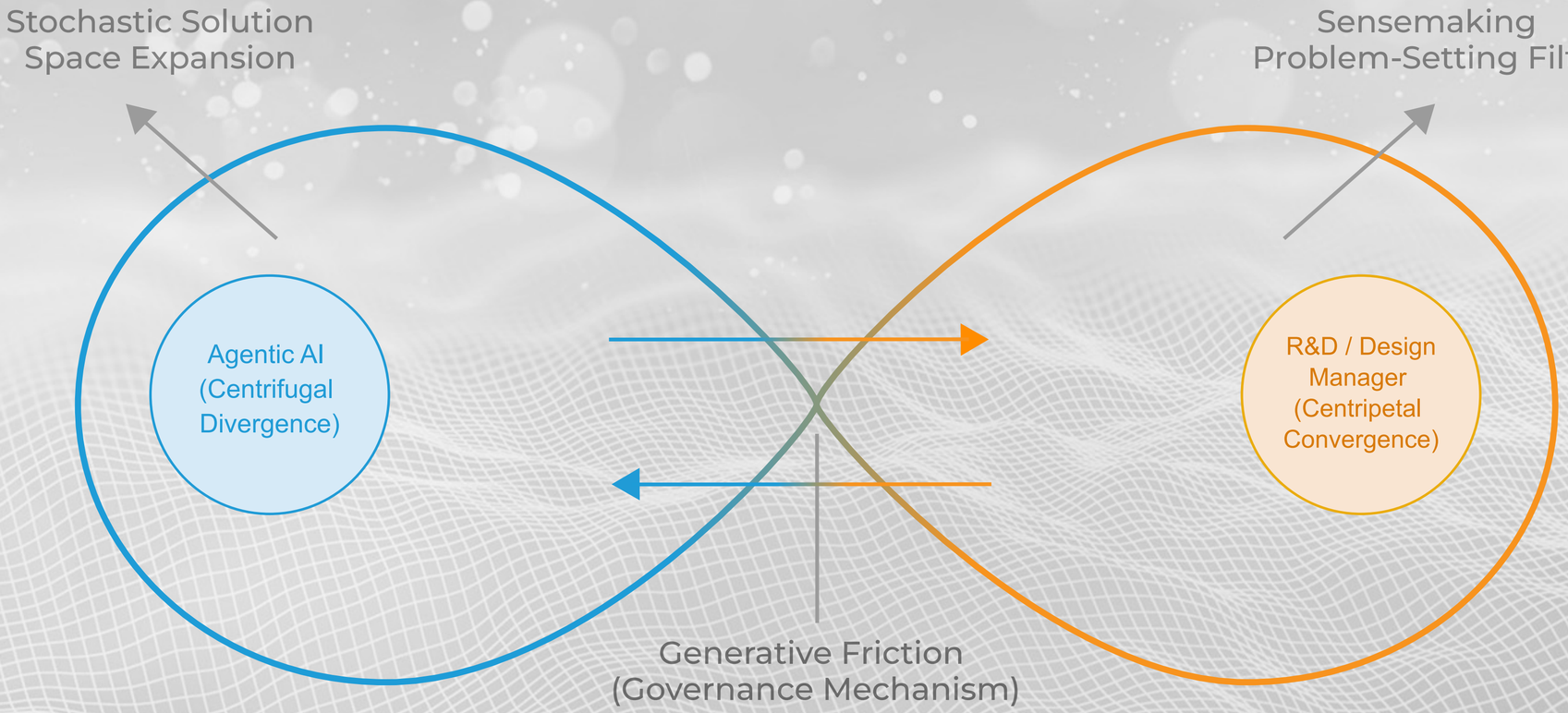
(Pietronudo et al., 2022).

3

The Governance Collapse:
Retrospective offline policies fail; pressure for delivery catalyzes covert adoption **(Shadow AI)**, validating ungrounded ideas

(Olar et al., 2025; Vallé et al., 2026).

DRO Model
(Double Relational Oscillation model)



This conceptual architecture illustrates the dialectical tension between the stochastic magnitude of Agentic AI (Centrifugal Divergence) and the retention of problem-setting by the human strategist (Centripetal Convergence). Within this paradigm, Generative Friction operates as the core governance mechanism that interrupts passive assimilation, forcing a contextual evaluation filter prior to design convergence.

Current Progress & Open Questions for Discussion



Ongoing Empirical Phase (Multiple-Case Study):

- **Context:** Startups, design agencies, and manufacturing SMEs in the Valencian ecosystem.
- **Methods:** Purposive agency-based screening, Critical Incident Technique, and digital archaeology in Figma/Miro version histories.

Open Inquiries for the HCI Community:

1. How can we codify human-first sequencing constraints directly into creative software APIs without compromising startup agility?
2. What heuristic traces in version repositories conclusively distinguish deliberate human curation from a superficial algorithmic edit?in Figma/Miro version histories.

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rperzui@doctor.upv.es

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